

Publications 2014

Journals Articles

Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Study of forward $Z + \text{jet}$ production in pp collisions at $\sqrt{s} = 7 \text{ TeV}$. *Journal of High Energy Physics : JHEP*, 2014(01), 033, doi:10.1007/JHEP01(2014)033

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Search for CP violation in $D^0 \rightarrow \pi^- \pi^0$ decays with the energy test. *Physics Letters B*, 740, 158–167. doi:10.1016/j.physletb.2014.11.043

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurement of the CP-violating phase ϕ_s in $\bar{B}_s^0 \rightarrow D_s^+ D_s^-$. *Physical Review Letters*, 113(21), 211801, doi:10.1103/PhysRevLett.113.211801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Precision measurement of the mass and lifetime of the Ξ_b^- baryon. *Physical Review Letters*, 113(24), 242002, doi:10.1103/PhysRevLett.113.242002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Search for CP violation using T-odd correlations in $D^0 \rightarrow K^+ K^- \pi^+ \pi^-$ decays. *Journal of High Energy Physics : JHEP*, 2014(10), 005, doi:10.1007/JHEP10(2014)005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Precision luminosity measurements at LHCb. *Journal of Instrumentation*, 9(12), P12005, doi:10.1088/1748-0221/9/12/P12005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the \bar{B}^0 - B^0 and \bar{B}_s^0 - B_s^0 production asymmetries in pp collisions at $\sqrt{s}=7 \text{ TeV}$. *Physics Letters B*, 739, 218–228. doi:10.1016/j.physletb.2014.10.005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Observation of $B_s^0 \rightarrow K^{*\pm} K^\mp$ and evidence for $B_s^0 \rightarrow K^* \pi^\pm$ decays. *New J. Phys.* 16 (2014) , 16(12), 123001, doi:10.1088/1367-2630/16/12/123001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the CKM angle γ using $B^\pm \rightarrow DK^\pm$ with $D \rightarrow K_s \pi^\pm \pi^\mp$, $K_s K^+ K^-$ decays . *Journal of High Energy Physics : JHEP*, 2014(10), 097, doi:10.1007/JHEP10(2014)097

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the $\chi_b(3\text{P})$ mass and of the relative rate of $\chi_{b1}(1\text{P})$ and $\chi_{b2}(1\text{P})$ production. *Journal of High Energy Physics : JHEP*, 2014(10), 088, doi:10.1007/JHEP10(2014)088

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). First observation of a baryonic B_c^+ decay. *Physical Review Letters*, 113(15), 152003, doi:10.1103/PhysRevLett.113.152003

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of CP asymmetry in $B_s^0 \rightarrow D_s^\pm K^\mp$ decays. *Journal of High Energy Physics : JHEP*, 2014(11), 060, doi:10.1007/JHEP11(2014)060

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the B_s^0 meson lifetime in $D_s^\pm K^\mp$ decays. *Physical Review Letters*, 113(17), 172001, doi:10.1103/PhysRevLett.113.172001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Dalitz plot analysis of decays $B_s^0 \rightarrow D^0 K^- \pi^+$ decays . *Physical Review D*, 90(7), 072003 , doi:10.1103/Phys-

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Evidence for CP violation in $B^+ \rightarrow \bar{p}pK^+$ decays. *Physical Review Letters*, 113(14), 141801, doi:10.1103/PhysRevLett.113.141801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of CP asymmetries in the decays $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ and $B^+ \rightarrow K^+ \mu^+ \mu^-$. *Journal of High Energy Physics : JHEP*, 2014(09), 177, doi:10.1007/JHEP09(2014)177

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Study of χ_b meson production in pp collisions at $\sqrt{s}=7$ and 8 TeV and observation of the decay $\chi_b \rightarrow Y(3S)\gamma$. *European Physical Journal C - Particles and Fields*, 74(10), 3092, doi:10.1140/epjc/s10052-014-3092-z

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). First observations of the rare decays $B^+ \rightarrow K^+ \pi^+ \pi^- \mu^+ \mu^-$ and $B^+ \rightarrow \phi K^+ \mu^+ \mu^-$. *Journal of High Energy Physics : JHEP*, 2014(010), 064, doi:10.1007/JHEP10(2014)064

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of CP violation parameters in $B^0 \rightarrow D\bar{K}^{*0}$ decays. *Physical Review D*, 90(11), 112002, doi:10.1103/PhysRevD.90.112002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Observation of charmonium pairs produced exclusively in pp collisions. *Journal of Physics G: Nuclear and Particle Physics*, 41, 115002, doi:10.1088/0954-3899/41/11/115002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of CP violation in $B_s^0 \phi \phi$ decays. *Physical Review D*, 90(5), 052011, doi:10.1103/PhysRevD.90.052011

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the ratio of B_c^+ branching fractions to $J/\psi \pi^+$ and $J/\psi \mu^+ \nu_\mu$. *Phys. Rev. D* 90, 032009 (2014), 90(3), 032009, doi:10.1103/PhysRevD.90.032009

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Test of lepton universality using $B^+ \rightarrow K^+ \ell^+ \ell^-$ decays. *Physical Review Letters*, 113(15), 151601, doi:10.1103/PhysRevLett.113.151601

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). First measurement of the charge asymmetry in beauty-quark pair production at a hadron collider. *Physical Review Letters*, 113(8), 082003, doi:10.1103/PhysRevLett.113.082003

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Observation of Z production in proton-lead collisions at LHCb. *Journal of High Energy Physics : JHEP*, 2014(9), 030, doi:10.1007/JHEP09(2014)030

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Precision measurement of the mass and lifetime of the Ξ_b^0 baryon. *Physical Review Letters*, 113(3), 032001, doi:10.1103/PhysRevLett.113.032001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Observation of the $\Lambda_b^0 \rightarrow J/\psi p \pi^-$ decay. *Journal of High Energy Physics : JHEP*, 2014(7), 103, doi:10.1007/JHEP07(2014)103

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Measurement of the CP-violating phase Φ_s in $\bar{B}_s^0 \rightarrow J/\psi \pi^+ \pi^-$ decays. *Physics Letters B*, 736, 186–195, doi:10.1016/j.physletb.2014.06.079

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Search

for CP violation in $D^\pm \rightarrow K_s^0 K^\pm$ and $D_s^\pm \rightarrow K_s^0 \pi^\pm$ decays. *Journal of High Energy Physics : JHEP*, 2014(10), 025, doi:10.1007/JHEP10(2014)025

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of CP violation and constraints on the CKM angle γ in $B^\pm \rightarrow DK^\pm$ with $D \rightarrow K_s^0 \pi^+ \pi^-$ decays. *Nuclear Physics B*, 888, 169–193. doi:10.1016/j.nuclphysb.2014.09.015

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Observation of the $B_s^0 \rightarrow J/\psi K_s^0 K^\pm \pi^\mp$ decay. *Journal of High Energy Physics : JHEP*, 2014(7), 140, doi:10.1007/JHEP07(2014)140

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Study of Y production and cold nuclear matter effects in pPb collisions at $\sqrt{s}_{NN} = 5$ TeV. *Journal of High Energy Physics : JHEP*, 2014(7), 094, doi:10.1007/JHEP07(2014)094

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Observation of the resonant character of the $Z(4430)^-$ state. *Physical Review Letters*, 112(22), 222002, doi:10.1103/PhysRevLett.112.222002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of CP asymmetry in $D^0 \rightarrow K^+ K^-$ and $D^0 \rightarrow \pi^+ \pi^-$ decays. *Journal of High Energy Physics : JHEP*, 2014(07), 041, doi:10.1007/JHEP07(2014)041

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of the resonant and CP components in $\bar{B}^0 \rightarrow J/\psi \pi^+ \pi^-$ decays. *Physical Review D*, 90(01), 012003, doi:10.1103/PhysRevD.90.012003

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Effective lifetime measurements in the $B_s^0 \rightarrow K^+ K^-$, $B^0 \rightarrow K^+ \pi^-$ and $B_s^0 \rightarrow \pi^+ K^-$ decays. *Physics Letters B*, 736, 446–454. doi:10.1016/j.physletb.2014.07.051

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of the Ξ_b^- and Ω_b^- baryon lifetimes. *Physics Letters B*, 736, 154–162. doi:10.1016/j.physletb.2014.06.064

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Evidence for the decay $B_c^+ \rightarrow J/\psi 3\pi^+ 2\pi^-$. *Journal of High Energy Physics : JHEP*, 2014(5), 148, doi:10.1007/JHEP05(2014)148

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Evidence for the decay $X(3872) \rightarrow \psi(2S)\gamma$. *Nuclear Physics B*, 886, 655–680. doi:10.1016/j.nuclphysb.2014.06.011

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Angular analysis of charged and neutral $B \rightarrow K \mu^+ \mu^-$ decays. *Journal of High Energy Physics : JHEP*, 2014(05), 082, doi:10.1007/JHEP05(2014)082

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Differential branching fractions and isospin asymmetries of $B \rightarrow K^{(*)} \mu^+ \mu^-$ decays. *Journal of High Energy Physics : JHEP*, 2014(06), 133, doi:10.1007/JHEP06(2014)133

Aaij, R., Abba, A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurement of polarization amplitudes and CP asymmetries in $B^0 \rightarrow \Phi K^*(892)^0$. *Journal of High Energy Physics : JHEP*, 2014(05), 069, doi:10.1007/JHEP05(2014)069

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Study of the kinematic dependences of Λ_b^0 production in pp collisions and a measurement of the $\Lambda_b^0 \rightarrow \Lambda_c^+ \pi^-$ branching fraction. *Journal of High Energy Physics : JHEP*, 2014(08), 143, doi:10.1007/JHEP08(2014)143

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Precision measurement of the ratio of the Λ_b^0 to \bar{B}^0 lifetimes. *Physics Letters B*, 734, 122–130. doi:10.1016/j.physletb.2014.05.021

Aaij, R., Abba, A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Study of beauty hadron decays into pairs of charm hadrons. *Physical Review Letters*, 112(20), 202001, doi:10.1103/PhysRevLett.112.202001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Observation of photon polarization in the $b \rightarrow s\gamma$ transition. *Physical Review Letters*, 112(16), 161801, doi:10.1103/PhysRevLett.112.161801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of charged particle multiplicities and densities in pp collisions at $\sqrt{s} = 7$ TeV in the forward region. *The European Physical Journal C: Particles and Fields*, 74(5), 2888, doi:10.1140/epjc/s10052-014-2888-1

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of resonant and CP components in $\bar{B}_s^0 \rightarrow J/\Psi \pi^+ \pi^-$ decays. *Physical Review D*, 89(9), 092006, doi:10.1103/PhysRevD.89.092006

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). A study of CP violation in $B^\pm \rightarrow DK^\pm$ and $B^\pm \rightarrow D\pi^\pm$ decay with $D \rightarrow K_s^0 K^\pm \pi^\pm$ final states. *Physics Letters B*, 733, 36–45. doi:10.1016/j.physletb.2014.03.051

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of $\psi(2S)$ polarisation in pp collisions at $\sqrt{s} = 7$ TeV. *The European Physical Journal C: Particles and Fields*, 74(5), 2872, doi:10.1140/epjc/s10052-014-2872-9

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of Υ production in pp collisions at $\sqrt{s} = 2.76$ TeV. *The European Physical Journal C: Particles and Fields*, 74, 2835, doi:10.1140/epjc/s10052-014-2835-1

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurements of the B^+ , B^0 , B_s^0 meson and Λ_b^0 baryon lifetimes. *Journal of High Energy Physics : JHEP*, 2014(4), 114, doi:10.1007/JHEP04(2014)114

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of the B_c^+ meson lifetime using $B_c^+ \rightarrow J/\psi \mu^+ \nu_\mu X$ decays. *European Physical Journal C - Particles and Fields*, 74, 2839, doi:10.1140/epjc/s10052-014-2839-x

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Search for Majorana neutrinos in $B^- \rightarrow \pi^+ \mu^- \mu^-$ decays. *Physical Review Letters*, 112(13), 131802, doi:10.1103/PhysRevLett.112.131802

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Observation of associated production of a Z boson with a D meson in the forward region. *Journal of High Energy Physics : JHEP*, 2014(4), 091, doi:10.1007/JHEP04(2014)091

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Searches for Λ_b^0 and Ξ_b^0 decays to $K_s^0 p\pi^- K_s^0 pK^-$ final states with first observation of the $\Lambda_b^0 \rightarrow K_s^0 p\pi^-$ decay. *Journal of High Energy Physics : JHEP*, 2014(04), 087, doi:10.1007/JHEP04(2014)087

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Measurement of the $\bar{B}_s^0 \rightarrow D_s^- D_s^+$ and $\bar{B}_s^0 \rightarrow D^- D_s^+$ effective lifetimes. *Physical Review Letters*, 112(11), 111802, doi:10.1103/PhysRevLett.112.111802

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Albrecht, J., ... LHCb Collaboration (2014). Updated measurements of exclusive J/ψ and $\psi(2S)$ production cross-sections in pp collisions at $\sqrt{s} = 7$ TeV. *Journal of Physics G: Nuclear and Particle Physics*, 41(5), 055002, doi:10.1088/0954-3899/41/5/055002

- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Search for CP violation in the decay $D^+ \rightarrow \pi^+\pi^+$. *Physics Letters B*, 278, 585–595. doi:10.1016/j.physletb.2013.12.035
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Studies of beauty baryon decays to $D^0\bar{h}^-$ and $\Lambda_c^+ h^-$ final states. *Physical Review D*, 89(3), 032001, doi:10.1103/PhysRevD.89.032001
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Observation of $\bar{B}_{(s)}^0 \rightarrow J/\Psi f_1(1285)$ decays and measurement of the $f_1(1285)$ mixing angle. *Physical Review Letters*, 112(09), 091802, doi:10.1103/PhysRevLett.112.091802
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurements of indirect CP asymmetries in $D^0 \rightarrow K^+K^-$ and $D^0 \rightarrow \pi^+\pi^-$ decays. *Physical Review Letters*, (04), LHCb-PAPER-2013-054, CERN-PH-EP-2013-180, doi:10.1103/PhysRevLett.112.041801
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Study of J/Ψ production and cold nuclear matter effects in pPb collisions at $\sqrt{s}_{NN} = 5$ TeV. *Journal of High Energy Physics : JHEP*, 2014(02), 072, doi:10.1007/JHEP02(2014)072
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurement of CP violation in the phase space of $B^\pm \rightarrow K^\pm K^\mp \pi^\pm$ and $B^\pm \rightarrow \pi^\pm \pi^\mp \pi^\pm$ decays. *Physical Review Letters*, 112(01), 011801, doi:10.1103/PhysRevLett.112.011801
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Search for the decay $D^0 \rightarrow \pi^+\pi^-\mu^+\mu^-$. *Physics Letters B*, 728, 234–243. doi:10.1016/j.physletb.2013.11.053
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurement of the charge asymmetry in $B^\pm \rightarrow \phi K^\pm$ and search for $B^\pm \rightarrow \phi \pi^\pm$ decays. *Physics Letters B*, 728, 85–94. doi:10.1016/j.physletb.2013.11.036
- Aaij, R., Adeva, B., Adinolfi, M., Adrover, C., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2014). Measurement of the flavour-specific CP-violating asymmetry a_{sl}^s in B_s^0 decays. *Physics Letters B* 728C (2014), Pp. 607–615, 728, 607–615. doi:10.1016/j.physletb.2013.12.030
- Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2014). Observation of overlapping spin-1 and spin-3 $\bar{D}^0 K^-$ resonances at mass 2.86 GeV/c². *Physical Review Letters*, 113(16), 162001. doi:10.1103/PhysRevLett.113.162001
- Abe, Y., Anjos, J. C. dos, Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2014). Background-independent measurement of θ_{13} in Double Chooz. *Physics Letters B*, 735, 51–56. doi:10.1016/j.physletb.2014.04.045
- Abe, Y., Anjos, J. C. dos, Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2014). Precision Muon Reconstruction in Double Chooz. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 764, 330–339. doi:10.1016/j.nima.2014.07.058
- Abe, Y., Anjos, J. C. dos, Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2014). Ortho-positronium observation in the Double Chooz Experiment. *Journal of High Energy Physics : JHEP*, 2014(10), 32, doi:10.1007/JHEP10(2014)032
- Abe, Y., Anjos, J. C. dos, Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2014). Improved measurements of the neutrino mixing angle θ_{13} with the Double Chooz detector. *Journal of High Energy Physics : JHEP*, 2014(10), 86, doi:10.1007/JHEP10(2014)086
- Abe, Y., Anjos, J. C. dos, Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2014). Erratum to: Improved measurements of the neutrino mixing angle θ_{13} with the Double Chooz detector. *Journal of High Energy Physics : JHEP*, 2015(2), 74, doi:10.1007/JHEP02(2015)074

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Discovery of the hard spectrum VHE gamma-ray source HESS J1641-463. *The Astrophysical Journal Letters*, 749(1), 794, doi:10.1088/2041-8205/794/1/L1

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Flux upper limits for 47 AGN observed with H.E.S.S. in 2004–2011. *Astronomy and Astrophysics*, 564, A9, doi:10.1051/0004-6361/201322897

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Erratum: “Search for Dark Matter Annihilation Signals from the Fornax Galaxy Cluster with H.E.S.S.” (2012, ApJ, 750, 123). *Astrophysical Journal*, 783(1), 63, doi:10.1088/0004-637X/783/1/63

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Search for extended γ -ray emission around AGN with H.E.S.S. and Fermi-LAT. *Astronomy and Astrophysics*, 562, A145, doi:10.1051/0004-6361/201322510

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). HESS J1818–154, a new composite supernova remnant discovered in TeV gamma rays and X-rays. *Astronomy and Astrophysics*, 562, A40, doi:10.1051/0004-6361/201322914

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). H.E.S.S. observations of the Crab during its March 2013 GeV gamma-ray flare. *Astronomy and Astrophysics*, 562, L4, doi:10.1051/0004-6361/201323013

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Discovery of the VHE gamma-ray source HESS J1832–093 in the vicinity of SNR G22.7–0.2. *Monthly Notices of the Royal Astronomical Society*, 447(2), 1163–1169. doi: 10.1093/mnras/stu2148

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2014). Long-term monitoring of PKS 2155–304 with ATOM and H.E.S.S.: investigation of optical/ γ -ray correlations in different spectral states. *Astronomy and Astrophysics*, 571(2), A39, doi:10.1051/0004-6361/201424142

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... HESS Collaboration (2014). Diffuse Galactic gamma-ray emission with H.E.S.S. *Physical Review D*, 90(12), 122007, doi:10.1103/PhysRevD.90.122007

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... HESS Collaboration (2014). Search for dark matter annihilation signatures in H.E.S.S. observations of dwarf spheroidal galaxies. *Physical Review D*, 90(11), 112012, doi:10.1103/PhysRevD.90.112012

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E., Anton, G., ... HESS Collaboration (2014). TeV γ -ray observations of the young synchrotron-dominated SNRs G1.9+0.3 and G330.2+1.0 with H.E.S.S. *Monthly Notices of the Royal Astronomical Society*, 441(1), 790–799. doi:10.1093/mnras/stu459

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E., Anton, G., ... HESS Collaboration (2014). Search for TeV Gamma-ray Emission from GRB 100621A, an extremely bright GRB in X-rays, with H.E.S.S. *Astrophysics & Astronomy*, 565, A16. doi:10.1051/0004-6361/201322984

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E., Anton, G., ... HESS Collaboration (2014). HESS J1640-465 - an exceptionally luminous TeV gamma-ray supernova remnant. *Monthly Notices of the Royal Astronomical Society*, 439(3), 2828–2836. doi:10.1093/mnras/stu139

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E., Anton, G., ... HESS Collaboration (2014). Erratum: HESS J1640–465 – an exceptionally luminous TeV γ -ray supernova remnant. *Monthly Notices of the Royal Astronomical Society*, 441(1), 3640–3642. doi: 10.1093/mnras/stu826

- Adey, D., Agarwalla, S. K., Ankenbrandt, C. M., Asfandiyarov, R., Back, J. J., Barker, G., ... Winter, W. (2014). Light sterile neutrino sensitivity at the nuSTORM facility. *Physical Review D*, 89(7), 071301(R), doi:10.1103/PhysRevD.89.071301
- Aghion, S., Ahlén, O., Amsler, C., Ariga, A., Ariga, T., Belov, A. S., ... Zmeskal, J. (2014). A moiré deflectometer for antimatter. *Nature Communications*, 5, 4538, doi:10.1038/ncomms5538
- Aghion, S., Ahl, O., Belov, A. S., Bonomi, G., Brusa, R. S., Burghart, G., ... Zavatarelli, S. (2014). Detection of low energy antiproton annihilations in a segmented silicon detector. *Journal of Instrumentation*, 2014(9), P06020, doi:10.1088/1748-0221/9/06/P06020
- Agostini, M., Allardt, M., Andreotti, E., Bakalyarov, A. M., Balata, M., Barabanov, I., ... Zuzel, G. (2014). The background in the neutrinoless double beta decay experiment GERDA. *The European Physical Journal C: Particles and Fields*, 24, 2764. doi:10.1140/epjc/s10052-014-2764-z
- Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2014). Upgrade of the GERDA Experiment. *Proceedings of Science*, TIPP2014, 109.
- Ahrens, S., Bauke, H., Keitel, C. H., & Grobe, R. (2014). Electron-spin dynamics induced by photon spins. *New Journal of Physics*, 16(10), 103028, doi:10.1088/1367-2630/16/10/103028
- Akamatsua, Y., Inutsuka, S., Nonakaa, C., & Takamoto, M. (2014). A new scheme of causal viscous hydrodynamics for relativistic heavy-ion collisions: A Riemann solver for quark-gluon plasma. *Journal of Computational Physics*, 256, 34–54. doi:10.1016/j.jcp.2013.08.047
- Albertsson, T., Indriolo, N., Kreckel, H., Semeno, D., Crabtree, K. N., & Henning, T. (2014). First time-dependent study of H_2 and H^+_3 ortho-para chemistry in the diffuse interstellar medium: observations meet theoretical predictions. . *The Astrophysical Journal*, 787(1), 44, 1–10. doi:10.1088/0004-637X/787/1/44
- Aliu, E., Archambault, S., Aune, T., Behera, B., Beilicke, M., Benbow, W., ... Zechlin, H.-S. (2014). Long-term TeV and X-ray Observations of the Gamma-ray Binary HESS J0632+057. *The Astrophysical Journal*, 780(2), 168. doi:10.1088/0004-637X/780/2/168
- Alnaser, A. S., Kübel, M., Siemering, R., Bergues, B., Kling, N. G., Betsch, K., ... Kling, M. F. (2014). Sub-femtosecond steering of hydrocarbon deprotonation through superposition of vibrational modes. *Nature Communications*, 5, 3800, doi:10.1038/ncomms4800
- Andreev, O. Y., Mistonova, E. A., & Voitkov, A. B. (2014). Relativistic Transfer Ionization and the Breit Interaction. *Physical Review Letters*, 112(10), 103202, doi:10.1103/PhysRevLett.112.103202
- Aprile, E., Agostini, F., Alfonsi, M., Arisaka, K., Arneodo, F., Auger, M., ... Weinheimer, C. (2014). Conceptual design and simulation of a water Cherenkov muon veto for the XENON1T experiment. *Journal of Instrumentation*, 9(11), P11006, doi:10.1088/1748-0221/9/11/P11006
- Aprile, E., Alfonsi, M., Arisaka, K., Arneodo, F., Balan, C., Baudis, L., ... Weinheimer, C. (2014). Observation and applications of single-electron charge signals in the XENON100 experiment. *Journal of Physics G: Nuclear and Particle Physics*, 41(3), 035201, doi:10.1088/0954-3899/41/3/035201
- Aprile, E., Agostini, F., Alfonsi, M., Arisaka, K., Arneodo, F., Auger, M., ... Weinheimer, C. (2014). First Axion Results from the XENON100 Experiment. *Physical Review D*, 90(6), 062009. doi:10.1103/PhysRevD.90.062009
- Aprile, E., Alfonsi, M., Arisaka, K., Arneodo, F., Balan, C., Baudis, L., ... Weinheimer, C. (2014). Analysis of the XENON100 Dark Matter Search Data. *Astroparticle Physics*, 54, 11–24. doi:10.1016/j.astropartphys.2013.10.002
- Arridge, C., Achilleos, N., Agarwal, J., B., A. C., M., A. R., André, N., ... Zarka, P. (2014). The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. *Planetary and Space Science*, 104, 122–140. doi:10.1016/j.pss.2014.08.009

Ascher, P., Blank, B., Blaum, K., Dupré, P., Gerbaux, M., Grévy, S., ... de Roubin, A. (2014). PIPERADE: A Penning-trap isobar separator for the DESIR low energy facility of SPIRAL2. *The European Physical Journal - Web of Conferences*, 66, 11002, doi:10.1051/epjconf/20146611002

Augustin, S., & Müller, C. (2014). Nonperturbative Bethe-Heitler pair creation in combined high- and low-frequency laser fields. *Physics Letters B*, 737, 114–119. doi:10.1016/j.physletb.2014.08.042

Barbiellini, G., Bastieri, D., Bechtol, K., Bellazzini, R., Blandford, R. D., Borgland, A. W., ... Yang, and Z. (2014). Fermi Large Area Telescope Observations of Blazar 3C 279 Occultations by the Sun . *Astrophysical Journal*, 784(2), 118, doi:10.1088/0004-637X/784/2/118

Barkov, M., Komissarov, S. S., Korolev, V., & Zankovich, A. (2014). A multi-dimensional numerical scheme for two-fluid Relativistic MHD. *Monthly Notices of the Royal Astronomical Society*, 438(1), 704–716. doi:10.1093/mnras/stt2247

Barkov, M., & Bosch-Ramon, V. (2014). Formation of large-scale magnetic structures associated with the Fermi bubbles. *Astronomy and Astrophysics*, 565, A65, doi:10.1051/0004-6361/201322743

Barry, J., Heeck, J., & Rodejohann, W. (2014). Sterile neutrinos and right-handed currents in KATRIN. *Journal of High Energy Physics : JHEP*, 2014(7), 81, doi:10.1007/JHEP07(2014)081

Baudis, L., Ferella, A., Kish, A., Manalaysay, A., Marrodán Undagoitia, T., & Schumann, M. (2014). Neutrino physics with multi-ton scale liquid xenon detectors. *Journal of Cosmology and Astroparticles Physics*, 2014(1), 044, doi:10.1088/1475-7516/2014/01/044

Bauke, H., Ahrens, S., Keitel, C. H., & Grobe, R. (2014). What is the relativistic spin operator? *New Journal of Physics*, 16(4), 043012, doi:10.1088/1367-2630/16/4/043012

Bauke, H., Ahrens, S., Keitel, C. H., & Grobe, R. (2014). Relativistic spin operators in various electromagnetic environments. *Physical Review A*, 89(5), 052101 , doi:10.1103/PhysRevA.89.052101

Bauke, H., Ahrens, S., & Grobe, R. (2014). Electron-spin dynamics in elliptically polarized light waves. *Physical Review A*, 90(5), 052101, doi:10.1103/PhysRevA.90.052101

Baumann, T. M., Harman, Z., Stark, J., Beilmann, C., Liang, G., Mokler, P., ... Crespo López-Urrutia, J. R. (2014). Contributions of dielectronic, trielectronic, and metastable channels to the resonant intershell recombination of highly charged silicon ions. *Physical Review A*, 90(5), 052704, doi:10.1103/PhysRevA.90.052704

Beerwerth, R., & Bauke, H. (2014). Krylov subspace methods for the Dirac equation. *Computer Physics Communications*, 188, 189–197. doi:10.1016/j.cpc.2014.11.008

Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., Avanzini, M. B., ... Zuzel, G. (2014). Final results of Borexino Phase-I on low energy solar neutrino spectroscopy. *Physical Review D*, 89(11), 112007, doi:10.1103/PhysRevD.89.112007

Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., Avanzini, M. B., ... Zuzel, G. (2014). Neutrinos from the primary proton–proton fusion process in the Sun . *Nature*, 512(7515), 383–386. doi:10.1038/nature13702

Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., Avanzini, M. B., ... Zuzel, G. (2014). Lifetimes of ^{214}Po and ^{212}Po measured with Counting Test Facility at Gran Sasso National Laboratory. *Journal of Environmental Radioactivity*, 138, 444–446. doi:10.1016/j.jenvrad.2014.02.025

Belov, N., & Harman, Z. (2014). State-selective high-energy excitation of nuclei by resonant positron annihilation. *Physics Letters B*, 741, 61–64. doi:10.1016/j.physletb.2014.12.002

Bernhardt, D., Becker, A., Grieser, M., Hahn, M., Krantz, C., Lestinsky, M., ... Schippers, and S. (2014). Absolute rate coefficients for photorecombination and electron-impact ionization of magnesiumlike iron ions from measurements at a heavy-ion storage ring . *Physical Review A*, 90(1), 012702, doi:10.1103/PhysRe-

- Beyer, T., Blaum, K., Block, M., Düllmann, C. E., Eberhardt, K., Eibach, M., ... Will, E. (2014). An RFQ cooler and buncher for the TRIGA-SPEC experiment. *Applied Physics B: Lasers and Optics*, 114(1-2), 129–136. doi:10.1007/s00340-013-5719-4
- Bissell, M. L., Papuga, J., Naïdja, H., Kreim, K. D., Blaum, K., Rydt, M. D., ... Yordanov, D. T. (2014). Proton-Neutron Pairing Correlations in the Self-Conjugate Nucleus³⁸K Probed via a Direct Measurement of the Isomer Shift. *Physical Review Letters*, 113(5), 052502, doi:10.1103/PhysRevLett.113.052502
- Bittner, S., Dietz, B., Harney, H. L., Miski-Oglu, M., Richter, A., & Schäfer, F. (2014). Scattering experiments with microwave billiards at an exceptional point under broken time-reversal invariance. *Physical Review E*, 89(3), 032909 , doi:10.1103/PhysRevE.89.032909
- Blackburn, T. G., Ridgers, C. P., Kirk, J. G., & Bell, A. R. (2014). Quantum Radiation Reaction in Laser-Electron-Beam Collisions. *Physical Review Letters*, 112(1), 015001, doi:10.1103/PhysRevLett.112.015001
- Blättermann, A., Chiang, C.-T., & Widdra, W. (2014). Atomic line emission and high-order harmonic generation in argon driven by 4-MHz sub-μJ laser pulses. *Physical Review A*, 89(4), 043404 , doi:10.1103/PhysRevA.89.043404
- Blättermann, A., Ott, C. R., Kaldun, A., Ding, T., & Pfeifer, T. (2014). Two-dimensional spectral interpretation of time-dependent absorption near laser-coupled resonances . *Journal of Physics B*, 47(12), 124008, doi:10.1088/0953-4075/47/12/124008
- Blaum, K. (2014). Was die Welt im Innersten zusammenhält. *Physik in Unserer Zeit*, 45(1), 3–3. doi:10.1002/piuz.201490003
- Blaum, K., Raizen, M. G., & Quint, W. (2014). An experimental test of the weak equivalence principle for antihydrogen at the future FLAIR facility. *International Journal of Modern Physics Conference Series*, 30, 1460264, doi:10.1142/S2010194514602646
- Böhm, C., Borgmann, C., Audi, G., Beck, D., Blaum, K., Breitenfeldt, M., ... Zuber, K. (2014). Evolution of nuclear ground-state properties of neutron-deficient isotopes around $Z = 82$ from precision mass measurements. *Physical Review C*, 90(4), 044307, doi:10.1103/PhysRevC.90.044307
- Boll, R., Rouzée, A., Adolph, M., Anielski , D., Aquila, A., Bari, S., ... Rolles, D. (2014). Imaging molecular structure through femtosecond photoelectron diffraction on aligned and oriented gas-phase molecules . *Faraday Discussions*, 171, 57–80. doi:10.1039/C4FD00037D
- Botermann, B., Bing, D., Geppert, C., Gwinner, G., Hänsch, T. W., Huber, G., ... Saathoff, G. (2014). Test of Time Dilation Using Stored Li⁺ Ions as Clocks at Relativistic Speed. *Physical Review Letters*, 113(12), 120405, doi:10.1103/PhysRevLett.113.120405
- Bozorgnia, N., & Schwetz, T. (2014). What is the probability that direct detection experiments have observed dark matter? *Journal of Cosmology and Astroparticles Physics*, 2014(12), 015, doi:10.1088/1475-7516/2014/12/015
- Bozorgnia, N., & Schwetz, T. (2014). Is the effect of the Sun's gravitational potential on dark matter particles observable? *Journal of Cosmology and Astroparticles Physics*, 2014(8), 013, doi:10.1088/1475-7516/2014/08/013
- Calibbi, L., Lindert, J. M., Ota, T., & Takanishi, Y. (2014). LHC tests of light neutralino dark matter without light sfermions. *Journal of High Energy Physics : JHEP*, 2014(11), 106, doi:10.1007/JHEP11(2014)106
- Casten, R. F., Cakirli, R. B., Blaum, K., & Couture, A. (2014). Evidence for Partial Dynamical Symmetries in Atomic Nuclei. *Physical Review Letters*, 113(11), 112501, doi:10.1103/PhysRevLett.113.112501
- Cavaletto, S., Harman, Z., Ott, C. R., Buth, C., Pfeifer, T., & Keitel, C. H. (2014). Broadband high-resolution X-ray frequency combs. *Nature Photonics*, 8(7), 520–523. doi:10.1038/nphoton.2014.113

Chandrasekaran, V., Kafle, B., Prabhakaran, A., Heber, O., Rappaport, M., Rubinstein, H., ... Zajfman, D. (2014). Determination of Absolute Recurrent Fluorescence Rate Coefficients for C₆. *The Journal of Physical Chemistry Letters*, 2014(5), 4078–4082. doi:10.1021/jz502100z

Chaudhuri, A., Andreoiu, C., Brodeur, M., Brunner, T., Chowdhury, U., Ettenauer, S., ... Dilling, J. (2014). TITAN: an ion trap for accurate mass measurements of ms-half-life nuclides. *Applied Physics B: Lasers and Optics*, 114(1-2), 99–105. doi:10.1007/s00340-013-5618-8

Ciornea, V., & Macovei, M. (2014). Cavity-output-field suppression due to interference effects. *Physical Review A*, 90(4), 043837. doi:10.1103/PhysRevA.90.043837

Cluver, M. E., Jarrett, T. H., Hopkins, A. M., Driver, S. P., Liske, J., Gunawardhana, M. L. P., ... Wilkins, S. M. (2014). Galaxy And Mass Assembly (GAMA): Mid-Infrared Properties and Empirical Relations from WISE. *Astrophysical Journal*, 782, 90. doi:10.1088/0004-637X/782/2/90

Cros, B., Paradkar, B. S., Davoine, X., Chancéd, A., Desforges, F. G., Dobosz-Dufrénoy, S., ... Amiranoff, F. (2014). Laser plasma acceleration of electrons with multi-PW laser beams in the frame of CILEX. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 740, 27–33. doi:10.1016/j.nima.2013.10.090

Darvasi, G., Keitel, C. H., & Butth, C. (2014). Optical control of an atomic inner-shell x-ray laser . *Physical Review A*, 89(1), 013823. doi:10.1103/PhysRevA.89.013823

Dasgupta, B., & Kopp, J. (2014). Cosmologically Safe eV-Scale Sterile Neutrinos and Improved Dark Matter Structure. *Physical Review Letters*, 112(03), 031803, doi:10.1103/PhysRevLett.112.031803

Dasguptaa, B., & Smirnov, A. (2014). Leptonic CP violation phases, quark–lepton similarity and seesaw mechanism. *Nuclear Physics B*, 884, 357–378. doi:10.1016/j.nuclphysb.2014.05.001

Di Piazza, A. (2014). Ultrarelativistic electron states in a general background electromagnetic field. *Physical Review Letters*, 113(4), 040402, doi:10.1103/PhysRevLett.113.040402

Di Piazza, A., & Milstein, A. I. (2014). Ultrarelativistic quasiclassical wave functions in strong laser and atomic fields . *Physical Review A*, 89(6), 062114 , doi:10.1103/PhysRevA.89.062114

Droese, C., Eliseev, S., Blaum, K., Block, M., Herfurth, F., Laatiaoui, M., ... Thirolf, P. G. (2014). The cryogenic gas stopping cell of SHIPTRAP. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 338, 126–138. doi:10.1016/j.nimb.2014.08.004

Dürr, M., & Fileviez Pérez, P. (2014). Baryonic Dark Matter. *Physics Letters B*, 732, 101–104. doi:10.1016/j.physletb.2014.03.011

Düsterer, S., Rehders, M., Al-Shemmary, A., Behrens, C., Brenner, G., Brovko, O., ... Schreiber, S. (2014). Development of experimental techniques for the characterization of ultrashort photon pulses of extreme ultra-violet free-electron lasers. *Physical Review Special Topics-Accelerators and Beams*, 17, 120702, doi:10.1103/PhysRevSTAB.17.120702

Eibach, M., Beyer, T., Blaum, K., Block, M., Düllmann, C. E., Eberhardt, K., ... Wendt, K. (2014). Direct high-precision mass measurements on ^{241,243}Am, ²⁴⁴Pu, and ²⁴⁹Cf. *Physical Review C*, 89(6), 064318, doi:10.1103/PhysRevC.89.064318

Eliseev, S., Blaum, K., Block, M., Dörr, A., Droese, C., Eronen, T., ... Schweikhard, L. (2014). A phase-imaging technique for cyclotron-frequency measurements. *Applied Physics B: Lasers and Optics*, 114(1-2), 107–128. doi:10.1007/s00340-013-5621-0

Fechner, L., Camus, N., Ullrich, J., Pfeifer, T., & Moshammer, R. (2014). Strong-Field Tunneling from a Coherent Superposition of Electronic States. *Physical Review Letters*, 112(21), 213001, doi:10.1103/PhysRevLett.112.213001

Fileviez Pérez, P., & Spinner , S. (2014). Supersymmetry at the LHC and The Theory of R-parity. *Physics Let-*

ters B, 728, 489–495. doi:10.1016/j.physletb.2013.12.022

Fileviez Pérez, P., & Patel, H. (2014). The Electroweak Vacuum Angle. *Physics Letters B*, 732, 241–243. doi:10.1016/j.physletb.2014.03.064

Fileviez Pérez, P., Ohmer, S., & Patel, H. (2014). Minimal Theory for Lepto-Baryons. *Physics Letters B*, 735, 283–287. doi:10.1016/j.physletb.2014.06.057

Fileviez Pérez, P., & Ohmer, S. (2014). Low Scale Unification of Gauge Interactions. *Physical Review D*, 90(3), 037701, doi:10.1103/PhysRevD.90.037701

Fileviez Pérez, P., & Patel, H. (2014). Baryon Asymmetry, Dark Matter and Local Baryon Number. *Physics Letters B*, 731, 232–235. doi:10.1016/j.physletb.2014.02.047

Filianin, P. E., Blaum, K., Eliseev, S., Gastaldo, L., Novikov, Y. N., Shabaev, V. M., ... Vergados, J. (2014). On the keV sterile neutrino search in electron capture. *Journal of Physics G: Nuclear and Particle Physics*, 41(9), 095004, doi:10.1088/0954-3899/41/9/095004

Fink, D., Richter, S. D., Blaum, K., Catherall, R., Crepieux, B., Fedosseev, V. N., ... Wendt, K. D. A. (2014). On-line implementation and first operation of the Laser Ion Source and Trap at ISOLDE/CERN. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 344, 83–95. doi:10.1016/j.nimb.2014.12.007

Furukawa, N., Ohama, A., Fukuda, T., Torii, K., Hayakawa, T., Sano, H., ... Fukui, Y. (2014). The jet and arc molecular clouds toward Westerlund 2, RCW 49, and HESS J1023-575; ^{12}CO and ^{13}CO ($J=2-1$ and $J=1-0$) observations with NANTEN2 and Mopra Telescope. *The Astrophysical Journal*, 781(2), 70, doi:10.1088/0004-637X/781/2/70

Gabici, S., & Aharonian, F. A. (2014). Hadronic gamma-rays from RX J1713.7-3946? *Monthly Notices of the Royal Astronomical Society: Letters*, 445(1), L70–L73. doi:10.1093/mnrasl/slu132

Gallant, A. T., Brodeur, M., Andreoiu, C., Bader, A., Chaudhuri, A., Chowdhury, U., ... Dilling, J. (2014). Breakdown of the Isobaric Multiplet Mass Equation for the $A = 20$ and 21 Multiplets. *Physical Review Letters*, 113(8), 082501, doi:10.1103/PhysRevLett.113.082501

Gärttner, M., Whitlock, S., Schönleber, D. W., & Evers, J. (2014). Semianalytical model for nonlinear absorption in strongly interacting Rydberg gases. *Physical Review A*, 89(6), 063407, doi:10.1103/PhysRevA.89.063407

Gärttner, M., Whitlock, S., Schönleber, D. W., & Evers, J. (2014). Collective Excitation of Rydberg-Atom Ensembles beyond the Superatom Model. *Physical Review Letters*, 113(23), 233002, doi:10.1103/PhysRevLett.113.233002

Gastaldo, L., Blaum, K., Dörr, A., Düllmann, C. E., Eberhardt, K., Eliseev, S., ... Wegner, M. (2014). The Electron Capture ^{163}Ho Experiment ECHo. *Journal of Low Temperature Physics*, 176, 876–884. doi:10.1007/s10909-014-1187-4

Giacche, S., Gilli, R., & Titarchuk, L. (2014). Analysis of X-ray spectral variability and black hole mass determination of the NLS1 galaxy Mrk 766. *Astrophysics & Astronomy*, 562, A44, doi:10.1051/0004-6361/201321904

Girardi, I., Meloni, D., Ohlsson, T., Zhang, H., & Zhou, S. (2014). Constraining Sterile Neutrinos Using Reactor Neutrino Experiments. *Journal of High Energy Physics : JHEP*, 2014(8), 057, doi:10.1007/JHEP08(2014)057

Gligorova, A., Aghion, S., Belov, A. S., Bonomi, G., Bräunig, P., Bremer, J., ... Zmeskal, J. (2014). Comparison of Planar and 3D Silicon Pixel Sensors Used for Detection of Low Energy Antiprotons. *IEEE Transactions on Nuclear Science*, 61(6), 3747–3753. doi:10.1109/TNS.2014.2368591

Gomez, L. F., Ferguson, K. R., Cryan, J. P., Bacellar, C., Tanyag, R. M. P., Jones, C., ... Vilesov, A. F. (2014). Shapes and vorticities of superfluid helium nanodroplets. *Science*, 345(6199), 906–909. doi:10.1126/science.1252395

Gong, X., Kunitski, M., Betsch, K., Song, Q., Schmidt, L. P. H., Jahnke, T., ... Wu, J. (2014). Multielectron effects in strong-field dissociative ionization of molecules. *Physical Review A*, 89(4), 043429, doi:10.1103/PhysRevA.89.043429

Gottberg, A., Stachura, M., Kowalska, M., Bissell, M. L., Arcisauskaite, V., Blaum, K., ... Szunyogh, D. (2014). Billion-Fold Enhancement in Sensitivity of Nuclear Magnetic Resonance Spectroscopy for Magnesium Ions in Solution. *ChemPhysChem*, 15(18), 3929–3932. doi:10.1002/cphc.201402619

Gottberg, A., Mendonca, T. M., Luis, R., Ramos, J. P., Seiffert, C., Cimmino, S., ... Stora, T. (2014). Experimental tests of an advanced proton-to-neutron converter at ISOLDE-CERN. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 336, 143–148. doi:10.1016/j.nimb.2014.04.026

Greljo, A., Kamenik, J. F., & Kopp, J. (2014). Disentangling Flavor Violation in the Top-Higgs Sector at the LHC. *Journal of High Energy Physics : JHEP*, 2014(7), 046, doi:10.1007/JHEP07(2014)046

Grootes, M., Tuffs, R. J., Popescu, C. C., Robotham, A. S. G., Seibert, M., & Kelvin, L. S. (2014). Non-Parametric Cell-Based Photometric Proxies for Galaxy Morphology: Methodology and Application to the Morphologically-Defined Star Formation -- Stellar Mass Relation of Spiral Galaxies in the Local Universe. *Monthly Notices of the Royal Astronomical Society: Letters*, 437(4), 3883–3987. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-0015-1272-F>

Gunst, J., Litvinov, Y. A., Keitel, C. H., & Pálffy, A. (2014). Dominant Secondary Nuclear Photoexcitation with the X-ray Free Electron Laser. *Physical Review Letters*, 112(8), 082501 , doi:10.1103/PhysRevLett.112.082501

Hahn, J., de los Reyes, R., Bernlöhr, K., Krüger, P., Lo, Y. T. E., Chadwick, P. M., ... Marandon, V. (2014). Impact of aerosols and adverse atmospheric conditions on the data quality for spectral analysis of the H.E.S.S. telescopes. *Astroparticle Physics*, 54, 25–32. doi:10.1016/j.astropartphys.2013.10.003

Hahn, M., Badnell, N. R., Grieser, M., Krantz, C., Lestinsky, M., Müller, A., ... Savin, D. W. (2014). Electron-Ion Recombination of Fe¹²⁺ Forming Fe¹¹⁺: Laboratory Measurements and Theoretical Calculations . *Astrophysical Journal*, 788(1), 46, doi:10.1088/0004-637X/788/1/46

Hansen, A. K., Versolato, O., Kłosowski, Ł., Kristensen, S. B., Gingell, A., Schwarz, M., ... Drewsen, M. (2014). Efficient rotational cooling of Coulomb-crystallized molecular ions by a helium buffer gas. *Nature*, 508(7494), 76–79. doi:10.1038/nature12996

Harbo, L. S., Dziarzhytski, S., Domesle, C., Brenner, G., Wolf, A., & Pedersen, H. B. (2014). Lifetime of low vibrational levels of the metastable B²B₂ state of H₂O⁺ probed by photodissociation at 532 nm. *Physical Review A*, 89(5), 052520, doi:10.1103/PhysRevA.89.052520

Hayakawa, A., Shimizu, Y., Tanimoto, M., & Yamamoto, K. (2014). Searching for the squark flavor mixing in CP violations of B_s → K⁺K⁻ and K⁰ K⁰ decays. *Progress of Theoretical and Experimental Physics* , 2014(2), 023B04 , doi:10.1093/ptep/ptu006

Heck, M., Ascher, P., Cakirli, R. B., Golzke, H., Rodríguez, D., Stahl, S., ... Blaum, K. (2014). An online FT-ICR Penning-trap mass spectrometer for the DPS2-F section of the KATRIN experiment. *Nuclear Instruments and Methods in Physics Research Section A*, 757, 54–61. doi:10.1016/j.nima.2014.03.057

Heeck, J. (2014). Unbroken B–L symmetry. *Physics Letters B*, 739, 256–262. doi:10.1016/j.physletb.2014.10.067

Helmrich, S., Spenneberg, K., & Pálffy, A. (2014). Coupling highly excited nuclei to the atomic shell in dense astrophysical plasmas . *Physical Review C*, 90(1), 015802, doi:10.1103/PhysRevC.90.015802

- Herwig, P., Zawatzky, K., Schwalm, D., Grieser, M., Heber, O., Jordon-Thaden, B., ... Kreckel, H. (2014). Absolute configuration assignment of a chiral molecule in the gas phase using foil-induced Coulomb explosion imaging. *Physical Review A*, 90(5), 052503, doi:10.1103/PhysRevA.90.052503
- Hillenbrand, P.-M., Hagmann, S., Voitkiv, A., Najjari, B., Banaś, D., Blumenhagen, K.-H., ... Stöhlker, T. (2014). Electron-loss-to-continuum cusp in $U^{88+} + N_2$ collisions. *Physical Review A*, 90(04), 042713, doi:10.1103/PhysRevA.90.042713
- Hillenbrand, P.-M., Hagmann, S., Atanasov, D., Banas, D., Blumenhagen, K.-H., Brandau, C., ... Stöhlker, T. (2014). Radiative-electron-capture-to-continuum cusp in $U^{88+} + N_2$ collisions and the high-energy endpoint of electron-nucleus bremsstrahlung. *Physical Review A*, 90(2), 022707, doi:10.1103/PhysRevA.90.022707
- Ilieva, S., Thürauf, M., Kröll, T., Krücken, R., Behrens, T., Bildstein, V., ... Winkler, S. (2014). Coulomb excitation of neutron-rich Cd isotopes. *Physical Review C*, 89(1), 014313, doi:10.1103/PhysRevC.89.014313
- Jalabert, R. A., Weick, G., Weidenmüller, H. A., & Weinmann, and D. (2014). Transmission phase of a quantum dot and statistical fluctuations of partial-width amplitudes. *Physical Review E*, 89(5), 052911, doi:10.1103/PhysRevE.89.052911
- Jasinski, J. M., Arridge, C. S., Lamy, L., Leisner, J. S., Thomsen, M. F., Mitchell, D. G., ... Waite, J. H. (2014). Cusp observation at Saturns high-latitude magnetosphere by the Cassini spacecraft. *Geophysical Research Letters*, 41, 1382–1388. doi:10.1002/2014GL059319
- Kafexhiu, E., Aharonian, F. A., Taylor, A. M., & Vila, G. S. (2014). Parametrization of gamma-ray production cross-sections for pp interactions in a broad proton energy range from the kinematic threshold to PeV energies. *Physical Review D*, 90(12), 123014, doi:10.1103/PhysRevD.90.123014
- Kaldun, A., Ott, C. R., Blättermann, A., Laux, M., Meyer, K., Ding, T., ... Pfeifer, T. (2014). Extracting Phase and Amplitude Modifications of Laser-Coupled Fano Resonances. *Physical Review Letters*, 112(10), 103001, doi:10.1103/PhysRevLett.112.103001
- Karjalainen, P., Rönkkö, T., Pirjola, L., Heikkilä, J., Happonen, M., Arnold, F., ... Keskinen, J. (2014). Sulfur driven nucleation mode formation in diesel exhaust under transient driving conditions. *Environmental Science and Technology*, 48(4), 2336–2343. doi:10.1021/es405009g
- Kellerbauer, A., Fischer, A., & Warring, U. (2014). Measurement of the Zeeman effect in an atomic anion: Prospects for laser cooling of Os^- . *Physical Review A*, 89(4), 043430, doi:10.1103/PhysRevA.89.043430
- Kelner, S. R., Lefa, E., Rieger, F. M., & Aharonian, F. A. (2014). The Beaming Pattern of External Compton Emission from Relativistic Outflows: The Case of Anisotropic Distribution of Electron. *Astrophysical Journal*, 785(2), 141, doi:10.1088/0004-637X/785/2/141
- Kelvin, L. S., Driver, S. P., Robotham, A. S. G., Taylor, E. N., Graham, A. W., Alpaslan, M., ... Tuffs, R. (2014). Galaxy And Mass Assembly (GAMA): Stellar mass functions by Hubble type. *Monthly Notices of the Royal Astronomical Society*, 444, 1647–1659. doi:10.1093/mnras/stu1507
- Kelvin, L. S., Driver, S. P., Robotham, A. S. G., Graham, A. W., Phillipps, S., Agius, N. K., ... Tuffs, R. (2014). Galaxy And Mass Assembly (GAMA): ugrizYJHK Sérsic luminosity functions and the cosmic spectral energy distribution by Hubble type. *Monthly Notices of the Royal Astronomical Society*, 439, 1245–1269. doi:10.1093/mnras/stt2391
- Ketter, J., Eronen, T., Höcker, M., Streubel, S., & Blaum, K. (2014). First-order perturbative calculation of the frequency-shifts caused by static cylindrically-symmetric electric and magnetic imperfections of a Penning trap. *International Journal of Mass Spectrometry*, 358, 1–16. doi:10.1016/j.ijms.2013.10.005
- Ketter, J., Eronen, T., Höcker, M., Schuh, M., Streubel, S., & Blaum, K. (2014). Classical calculation of relativistic frequency-shifts in an ideal Penning trap. *International Journal of Mass Spectrometry*, 361, 34–40. doi:10.1016/j.ijms.2014.01.028

Khangulyan, D., Aharonian, F. A., & Kelner, S. R. (2014). Simple analytical approximations for treatment of inverse Compton scattering of relativistic electrons in the black-body radiation field. *The Astrophysical Journal*, 783(2), 100, doi:10.1088/0004-637X/783/2/100

King, S. F., Merle, A., Morisi, S., Shimizu, Y., & Tanimoto, M. (2014). Neutrino mass and mixing: from theory to experiment . *New Journal of Physics*, 16(4), 045018, doi:10.1088/1367-2630/16/4/045018

Klaiber, M., & Hatsagortsyan, K. Z. (2014). Spin-asymmetric laser-driven relativistic tunneling from ρ states. *Physical Review A: Atomic, Molecular, and Optical Physics*, 90(6), 063416, doi:10.1103/PhysRevA.90.063416

Klaiber, M., Yakaboylu, E., Müller, C., Bauke, H., Paulus, G. G., & Hatsagortsyan, K. Z. (2014). Spin dynamics in relativistic ionization with highly charged ions in super-strong laser fields . *Journal of Physics B*, 47(6), 065603, doi:10.1088/0953-4075/47/6/065603

Köhler, F., Sturm, S., Quint , W., & Blaum, K. (2014). Das Elektron auf der Waage. *Physik in Unserer Zeit*, 45(6), 292–298. doi:10.1002/piuz.201401380

Kong, X., Liao, W.-T., & Pálffy, A. (2014). Field control of single x-ray photons in nuclear forward scattering. *New Journal of Physics*, 16(1), 013049, doi:10.1088/1367-2630/16/1/013049

Kopp, J., & Welter, J. M. (2014). The Not-So-Sterile 4th Neutrino: Constraints on New Gauge Interactions from Neutrino Oscillation Experiments. *Journal of High Energy Physics : JHEP*, 2014(12), 104, doi:10.1007/JHEP12(2014)104

Kopp, J., & Nardecchia, M. (2014). Flavor and CP violation in Higgs decays. *Journal of High Energy Physics : JHEP*, 2014(10), 156, doi:10.1007/JHEP10(2014)156

Kopp, J., Michaels, L., & Smirnov, J. (2014). Loopy constraints on leptophilic dark matter and internal bremsstrahlung . *Journal of Cosmology and Astroparticles Physics*, 2014(4), 022, doi:10.1088/1475-7516/2014/04/022

Krantz, C., Spruck, K., Badnell, N. R., Becker, A., Bernhardt, D., Grieser, M., ... Schippers, S. (2014). Absolute rate coefficients for the recombination of open f-shell tungsten ions. *Journal of Physics: Conference Series*, 488(1), 012051, doi:10.1088/1742-6596/488/1/012051

Krätschmer, W. (2014). Fullerenes, Carbon Chains, and Interstellar Matter. *Fullerenes, Nanotubes, and Carbon Nanostructures*, 24(1-3), 23–34. doi:10.1080/1536383X.2013.794347

Kreckel, H., Herwig, P., Schwalm, D., Cizek, M., Golser, R., Heber, O., ... Wolf, A. (2014). Metastable states of diatomic hydrogen anions. *Journal of Physics: Conference Series*, 488(Section1), 012034, doi:10.1088/1742-6596/488/1/012034

Kreim, S., Beck, D., Blaum, K., Borgmann, C., Breitenfeldt, M., Cocolios, T. E., ... Zuber, K. (2014). Competition between pairing correlations and deformation from the odd-even mass staggering of francium and radium isotopes. *Physical Review C*, 90(2), 024301, doi:10.1103/PhysRevC.90.024301

Kreim, K. D., Bissell, M. L., Papuga, J., Blaum, K., De Rydt, M., Garcia Ruiz, R. F., ... Yordanov, D. T. (2014). Nuclear charge radii of potassium isotopes beyond N = 28. *Physics Letters B*, 731, 97–102. doi:10.1016/j.physletb.2014.02.012

Kreim, S., Wienholtz, F., & Wolf, R. (2014). Multi-Reflection Time-of-Flight Mass Separation and Spectrometry. *Nuclear Physics News*, 24(2), 20–23. doi:10.1080/10619127.2014.910430

Krishnan, S. R., Gopal, R., Rajeev, R., Jha, J., Sharma, V., Mudrich, M., ... Krishnamurthy, M. (2014). Photoionization of clusters in intense few-cycle near infrared femtosecond pulses . *Physical Chemistry Chemical Physics*, 2014(16), 8721–8730. doi:10.1039/C3CP55380A

Krüger, H., & Agarwal, J. (2014). Rosetta - Rendezvous mit einem Kometen. *Sterne Und Weltraum*, 04/2014, 32–42.

Kübel, M., Betsch, K., Kling , N. G., Alnaser, A. S., Schmidt, J., Kleineberg, U., ... Bergues, B. (2014). Non-sequential double ionization of Ar: from the single- to the many-cycle regime. *New Journal of Physics*, 16(3), 033008, doi:10.1088/1367-2630/16/3/033008

Kübel, M., Alnaser, A. S., Bergues, B., Pischke, T., Schmidt, J., Deng, Y., ... Kling, M. F. (2014). Strong-field control of the dissociative ionization of N₂O with near-single-cycle pulses. *New Journal of Physics*, 16(6), 065017, doi:10.1088/1367-2630/16/6/065017

Kubicek, K., Mokler, P. H., Mäckel, V., Ullrich, J., & Crespo López-Urrutia, J. R. (2014). Transition energy measurements in hydrogenlike and heliumlike ions strongly supporting bound-state QED calculations. *Physical Review A*, 90(3), 032508 , doi:10.1103/PhysRevA.90.032508

Kubo, J., Lim, K. S., & Lindner, M. (2014). Electroweak Symmetry Breaking via QCD. *Physical Review Letters*, 113(9), 091604, doi:10.1103/PhysRevLett.113.091604

Kubo, J., Lim, K. S., & Lindner, M. (2014). Gamma-ray line from Nambu-Goldstone dark matter in a scale invariant extension of the Standard Model. *Journal of High Energy Physics*, 2014(9), 016, doi:10.1007/JHEP09(2014)016

Küpper, J., Stern, S., Holmegaard, L., Filsinger, F., Rouzée, A., Rudenko, A., ... Chapman, H. N. (2014). X-Ray Diffraction from Isolated and Strongly Aligned Gas-Phase Molecules with a Free-Electron Laser . *Physical Review Letters*, 112(8), 083002, doi:10.1103/PhysRevLett.112.083002

Kwiatkowski, A. A., Andreoiu, C., Bale, J. C., Brunner, T., Chaudhuri, A., Chowdhury, U., ... Dilling, J. (2014). TITAN: An ion trap facility for on-line mass measurement experiments. *Hyperfine Interactions*, 225(1-3), 143–155. doi:10.1007/s10751-013-0892-8

Kwiatkowski, A. A., Brunner, T., Holt, J. D., Chaudhuri, A., Chowdhury, U., Eibach, M., ... Dilling, J. (2014). New determination of double-β-decay properties in ⁴⁸Ca: High-precision Q_{ββ}-value measurement and improved nuclear matrix element calculations. *Physical Review C*, 89(4), 045502, doi:10.1103/PhysRevC.89.045502

Lennarz, A., Grossheim, A., Leach, K. G., Alanssari, M., Brunner, T., Chaudhuri, A., ... Frekers, D. (2014). In-Trap Spectroscopy of Charge-Bred Radioactive Ions. *Physical Review Letters*, 113(8), 082502, doi:10.1103/PhysRevLett.113.082502

Lennarz, A., Brunner, T., Andreoiu, C., Chaudhuri, A., Chowdhury, U., Delheij, P., ... Simon, V. V. (2014). Electron-capture branching ratio measurements of odd-odd intermediate nuclei in double-beta decay at the TITAN facility. *Hyperfine Interactions*, 225(1-3), 157–164. doi:10.1007/s10751-013-0893-7

Leone, S. R., McCurdy, C. W., Burgdörfer, J., Cederbaum, L. S., Chang, Z., Dudovich, N., ... Vrakking, M. J. J. (2014). What will it take to observe processes in “real time”? *Nature Photonics*, 8(3), 162–166. doi:10.1038/nphoton.2014.48

Li, J.-X., Hatsagortsyan, K. Z., & Keitel, C. H. (2014). Robust Signatures of Quantum Radiation Reaction in Focused Ultrashort Laser Pulses . *Physical Review Letters*, 113(4), 044801 , doi:10.1103/PhysRevLett.113.044801

Liao, W.-T., Keitel, C. H., & Pálffy, A. (2014). All-Electromagnetic Control of Broadband Quantum Excitations Using Gradient Photon Echoes. *Physical Review Letters*, 113(12), 123602, doi:10.1103/PhysRevLett.113.123602

Liao, W.-T., & Pálffy, A. (2014). Proposed Entanglement of X-ray Nuclear Polaritons as a Potential Method for Probing Matter at the Subatomic Scale. *Physical Review Letters*, 112(5), 057401, doi:10.1103/PhysRevLett.112.057401

Lindemann, S., & Simgen, H. (2014). Krypton assay in xenon at the ppq level using a gas chromatographic system combined with a mass spectrometer. *The European Physical Journal C: Particles and Fields*, 74, 2746, doi:10.1140/epjc/s10052-014-2746-1

Lindner, M., Schmidt, S., & Smirnov, J. (2014). Neutrino masses and conformal electro-weak symmetry

- breaking. *Journal of High Energy Physics : JHEP*, 2014(10), 177, doi:10.1007/JHEP10(2014)177
- Lindner, M., Schmidt, D., & Watanabe, A. (2014). Dark matter and U(1)' symmetry for the right-handed neutrinos. *Physical Review D*, 89(1), 013007, doi:10.1103/PhysRevD.89.013007
- Liu, Z., Ott, C. R., Cavaletto, S., Harman, Z., Keitel, C. H., & Pfeifer, T. (2014). Generation of high-frequency combs locked to atomic resonances by quantum phase modulation. *New Journal of Physics*, 16(9), 093005, doi:10.1088/1367-2630/16/9/093005
- Liu, Y., Fu, L., Ye , D., Liu, J., Li, M., Wu, C., ... Ullrich, J. H. (2014). Strong-Field Double Ionization through Sequential Release from Double Excitation with Subsequent Coulomb Scattering. *Physical Review Letters*, 112(1), 013003, doi:10.1103/PhysRevLett.112.013003
- Longo, P., & Evers, J. (2014). Far-Field Signatures of a Two-Body Bound State in Collective Emission from Interacting Two-Level Atoms on a Lattice . *Physical Review Letters*, 112(19), 193601 , doi:10.1103/PhysRevLett.112.193601
- Longo, P., & Evers, J. (2014). Probing few-excitation eigenstates of interacting atoms on a lattice by observing their collective light emission in the far field. *Physical Review A: Atomic, Molecular, and Optical Physics*, 90(6), 063834 , doi:10.1103/PhysRevA.90.063834
- Macdonald, T. D., Schultz, B. E., Bale, J. C., Chaudhuri, A., Chowdhury, U., Frekers, D., ... Dilling, J. (2014). Precision Penning-trap measurement to investigate the role of the $^{51}\text{Cr}(\text{e}^-, \nu_e)^{51}\text{V}$ Q value in the gallium anomaly. *Physical Review C*, 89(4), 044318, doi:10.1103/PhysRevC.89.044318
- Macovei, M., & Keitel, C. H. (2014). Quantum dynamics of a two-level emitter with modulated transition frequency. *Physical Review A*, 90(4), 043838, doi:10.1103/PhysRevA.90.043838
- Maio, U., & Barkov, M. (2014). Signatures of very massive stars: supercollapsars and their cosmological rate. *Monthly Notices of the Royal Astronomical Society*, 439(4), 3520–3525. doi:10.1093/mnras/stu204
- Mariazzi, S., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A. S., ... Zmeskal, J. (2014). AEgIS experiment: Towards antihydrogen beam production for antimatter gravity measurements. *The European Physical Journal D: Atomic, Molecular and Optical Physics*, 68(3), 41, doi:10.1140/epjd/e2013-40690-3
- Marsh, B. A., Fedosseev, V. N., Fink, D., Day Goodacre, T., Rossel, R. E., Rothe, S., ... Molkanov, P. (2014). RILIS applications at CERN/ISOLDE. *Hyperfine Interactions*, 227(1-3), 101–111. doi:10.1007/s10751-014-1051-6
- McKinley, B., Yang, R., López-Caniego, M., Briggs, F., Hurley-Walker, N., Wayth, R. B., ... Williams, C. L. (2014). Modelling of the Spectral Energy Distribution of Fornax A: Leptonic and Hadronic Production of High Energy Emission from the Radio Lobes. *Monthly Notices of the Royal Astronomical Society*, 446(4), 3478–3491. doi:10.1093/mnras/stu2310
- Mei, B., Xu, H. S., Tu, X. L., Zhang, Y. H., Litvinov, Y. A., Schmidt, K.-H., ... Zhan, W. L. (2014). Origin of odd-even staggering in fragment yields: Impact of nuclear pairing and shell structure on the particle-emission threshold energy. *Physical Review C*, 89(5), 054612, doi:10.1103/PhysRevC.89.054612
- Menk, S., Das, S., Blaum, K., Froese, M. W., Lange, M., Mukherjee, M., ... Wolf, A. (2014). Vibrational autodetachment of sulfur hexafluoride anions at its long-lifetime limit. *Physical Review A*, 89(2), 022502, doi:10.1103/PhysRevA.89.022502
- Merle, A., Niro, V., & Schmidt, D. (2014). New production mechanism for keV sterile neutrino Dark Matter by decays of frozen-in scalars. *Journal of Cosmology and Astroparticles Physics*, 2014(3), 028, doi:1475-7516/2014/03/028
- Mochol, I., & Kirk, J. G. (2014). The stability of strong waves and its implications for pulsar wind shocks. *Astronomische Nachrichten*, 335(3), 256–261. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-0025-6829-8>

- Mooser, A., Ulmer, S., Blaum, K., Franke, K., Kracke, H., Leiteritz, C., ... Walz, J. (2014). Direct high-precision measurement of the magnetic moment of the proton. *Nature*, 509(7502), 596–599. doi:10.1038/nature13388
- Müller, S., Keitel, C. H., & Müller, C. (2014). Higgs boson creation in laser-boosted lepton collisions. *Physics Letters B*, 730, 161–165. doi:10.1016/j.physletb.2014.01.047
- Müller, S., Keitel, C. H., & Müller, C. (2014). Particle production reactions in laser-boosted lepton collisions. *Physical Review D*, 90(9), 094008, doi:10.1103/PhysRevD.90.094008
- Natale, G., Foyle, K., Wilson, C. D., & Kuno, N. (2014). A multiwavelength analysis of the clumpy FIR-bright sources in M33. *Monthly Notices of the Royal Astronomical Society*, 441(1), 224–242. doi:10.1093/mnras/stu560
- Natale, G., Popescu, C. C., Tuffs, R., & Semionov, D. (2014). dart-ray: a 3D ray-tracing radiative transfer code for calculating the propagation of light in dusty galaxies . *Monthly Notices of the Royal Astronomical Society*, 438, 3137–3162.
- Neitz, N., & Di Piazza, A. (2014). Electron-beam dynamics in a strong laser field including quantum radiation reaction. *Physical Review A*, 90(2), 022102 , doi:10.1103/PhysRevA.90.022102
- Nesterenko, D. A., Eliseev, S., Blaum, K., Block, M., Chenmarev, S., Dörr, A., ... Simon, V. V. (2014). Direct determination of the atomic mass difference of ^{187}Re and ^{187}Os for neutrino physics and cosmochronology. *Physical Review C*, 90(4), 042501(R), doi:10.1103/PhysRevC.90.042501
- Novotný, O., Becker, A., Buhr , H., Domesle, C., Geppert, W., Grieser, M., ... Savin, D. W. (2014). Erratum: Dissociative Recombination Measurements of HCl^+ Using an Ion Storage Ring (2013, ApJ, 777, 54) . *The Astrophysical Journal*, 795(2), 176, doi:10.1088/0004-637X/795/2/176
- Novotný, O., Becker, A., Buhr , H., Domesle, C., Geppert, W., Grieser, M., ... Savin, D. W. (2014). Dissociative Recombination Measurements of NH^+ Using an Ion Storage Ring . *The Astrophysical Journal*, 792(2), 132, doi:10.1088/0004-637X/792/2/132
- Ohlsson, T., Zhang, H., & Zhou, S. (2014). Nonstandard interaction effects on neutrino parameters at medium-baseline reactor antineutrino experiments. *Physics Letters B*, 728, 148–155. doi:10.1016/j.physletb.2013.11.052
- Oreshkina, N., Cavaletto, S., Keitel, C. H., & Harman, Z. (2014). Astrophysical line diagnosis requires non-linear dynamical atomic modeling. *Physical Review Letters*, 113(14), 143001, doi:10.1103/PhysRevLett.113.143001
- Ott, C. R., Kaldun, A., Argenti, L., Raith, P., Meyer, K., Laux, M., ... Pfeifer, T. (2014). Reconstruction and control of a time-dependent two-electron wave packet. *Nature*, 516(7531), 374–378. doi:10.1038/nature14026
- Pacea, A. D., Molinarib, A., & Weidenmüller, H. A. (2014). Doorway states in the random-phase approximation. *Annals of Physics*, 351, 579–592. doi:10.1016/j.aop.2014.09.017
- Pálffy, A., & Weidenmüller, H. A. (2014). Laser-Nucleus Reactions: Population of States far above Yrast and far from Stability. *Physical Review Letters*, 112(19), 192502 , doi:10.1103/PhysRevLett.112.192502
- Papash, A., Smirnov , A. V., & Welsch, C. P. (2014). Beam dynamics in an ultra-low energy storage rings (review of existing facilities and feasibility studies for future experiments). *Physics of Particles and Nuclei*, 45(2), 409–451. doi:10.1134/S106377961402004X
- Papenbrock, T., & Weidenmüller, H. A. (2014). Effective field theory for finite systems with spontaneously broken symmetry. *Physical Review C*, 89(1), 014334, doi:10.1103/PhysRevC.89.014334
- Papuga, J., Bissell, M. L., Kreim, K. D., Barbieri, C., Blaum, K., Rydt, M. D., ... Yordanov, D. T. (2014). Shell structure of potassium isotopes deduced from their magnetic moments. *Physical Review A*, 90(3), 034321.

doi:10.1103/PhysRevC.90.034321

Paredes, J. M., Ishwara-Chandra, C. H., Bosch-Ramon, V., Zabalza, V., Iwasawa, K., & Ribó, M. (2014). Deep GMRT radio observations and a multi-wavelength study of the region around HESS J1858+020. *Astronomy and Astrophysics*, 561, A56, doi:10.1051/0004-6361/201322306

Parsons, R. D., & Hinton, J. A. (2014). A Monte Carlo Template based analysis for Air-Cherenkov Arrays. *Astroparticle Physics*, 56, 26–34. doi:10.1016/j.astropartphys.2014.03.002

Peter, D., Domainko, W., Sanchez, D., van der Wel, A., & Gäßler, W. (2014). The host galaxy and Fermi-LAT counterpart of HESS J1943+213. *Astronomy and Astrophysics*, 571, A41, doi:10.1051/0004-6361/201423807

Petri, J., Takamoto, M., Baty, H., & Zenitani, S. (2014). Explosive reconnection of the double tearing mode in relativistic plasmas with application to the Crab nebula. *Plasma Physics and Controlled Fusion*, 57(1), 014034. doi:10.1088/0741-3335/57/1/014034

Petrignani, A., Berg, M. H., Grussie, F., Wolf, A., Mizus, I. I., Polyansky, O. L., ... Adamowicz, L. (2014). Communication: Visible line intensities of the triatomic hydrogen ion from experiment and theory. *The Journal of Chemical Physics*, 141(24), 241104, doi:10.1063/1.4904440

Pike, O. J., Mackenroth, K. F., Hill, E. G., & Rose, S. J. (2014). A photon–photon collider in a vacuum hohlraum. *Nature Photonics*, 8(6), 434–436. doi:10.1038/nphoton.2014.95

Pluhař, Z., & Weidenmüller, H. A. (2014). Universal Quantum Graphs. *Physical Review Letters*, 112(14), 144102, doi:10.1103/PhysRevLett.112.144102

Pöml, P., Belloni, F., D'Agata, E., Colineau, E., Morgenstern, A., Griveau, J.-C., ... Himbert, J. (2014). Comparison of the alpha-decay half-life of ^{210}Po implanted in a copper matrix at 4.2 and 293 K. *Physical Review C*, 89(2), 024320, doi:10.1103/PhysRevC.89.024320

Portela, M. N., Dijck, E. A., Mohanty, A., Bekker, H., van den Berg, J. E., Giri, G. S., ... Jungmann, K. (2014). Ra^+ ion trapping: toward an atomic parity violation measurement and an optical clock. *Applied Physics B: Lasers and Optics*, 114(1-2), 173–182. doi:10.1007/s00340-013-5603-2

Pullen, M. G., Dura, J., Wolter, B., Baudisch, M., Hemmer, M., Camus, N., ... Biegert, J. (2014). Kinematically complete measurements of strong field ionization with mid-IR pulses. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 47, 204010, doi:10.1088/0953-4075/47/20/204010

Reifarth, R., & Litvinov, Y. A. (2014). Measurements of neutron-induced reactions in inverse kinematics. *Physical Review Special Topics-Accelerators and Beams*, 17(1), 014701, doi:10.1103/PhysRevSTAB.17.014701

Reitsma, G., Gonzalez-Magaña, O., Versolato, O., Door, M., Hoekstra, R., Suraud, E., ... Schlathölter, T. (2014). Femtosecond laser induced ionization and dissociation of gas-phase protonated leucine enkephalin. *International Journal of Mass Spectrometry*, 365-366, 365–371. doi:10.1016/j.ijms.2014.01.004

Ren, X. G., Pflüger, T., Weyland, M., Baek, W. Y., Rabus, H., Ullrich, J., & Dorn, A. (2014). An (e , $2e + \text{ion}$) study of low-energy electron-impact ionization and fragmentation of tetrahydrofuran with high mass and energy resolutions. *The Journal of Chemical Physics*, 141(13), 134314, doi:10.1063/1.4896614

Ridgers, C. P., Kirk, J. G., Duclous, R., Blackburn, T., Brady, C. S., Bennett, K., ... Bell, A. R. (2014). Modelling Gamma Ray Emission and Pair Production in High-Intensity Laser-Matter Interactions. *Journal of Computational Physics*, 260, 273–285. doi:10.1016/j.jcp.2013.12.007

Rodejohann, W., & Zhang, H. (2014). Reducing θ_{13} to 9° . *Physics Letters B*, 732, 174–181. doi:10.1016/j.physletb.2014.03.040

Rolles, D., Boll, R., Adolph, M., Aquila, A., Bostedt, C., Bozek, J. D., ... Ullrich, J. (2014). Femtosecond x-ray photoelectron diffraction on gas-phase dibromobenzene molecules. *Journal of Physics B*, 47(12), 124035, doi:10.1088/0953-4075/47/12/124035

Rosenbusch, M., Atanasov, D., Blaum, K., Borgmann, C., Kreim, S., Lunney, D., ... Wolf, R. N. (2014). Ion bunch stacking in a Penning trap after purification in an electrostatic mirror trap. *Applied Physics B: Lasers and Optics*, 114(1-2), 147–155. doi:10.1007/s00340-013-5702-0

Roux, F., & Uhlhaas, P. J. (2014). Working memory and neural oscillations: alpha-gamma versus theta-gamma codes for distinct WM information? *Trends in Cognitive Sciences*, 18(1), 16–25. doi:<http://dx.doi.org/10.1016/j.tics.2013.10.010>

Sarri, G., Corvan, D. J., Schumaker, W., Cole, J., Di Piazza, A., Ahmed, H., ... Zepf, M. (2014). Ultrahigh Brilliance Multi-MeV γ -Ray Beams from Nonlinear Relativistic Thomson Scattering. *Physical Review Letters*, 113(22), 224801, doi:10.1103/PhysRevLett.113.224801

Scampoli, P., Aghion, S., Ahlén, O., Amsler, C., Ariga, A., Ariga, T., ... Zmeskal, J. (2014). Development of nuclear emulsions operating in vacuum for the AEgIS experiment. *Journal of Instrumentation*, 9(1), C01061, doi:10.1088/1748-0221/9/01/C01061

Schempp, H., Günter, G., Robert-de-Saint-Vincent, M., Hofmann, C. S., Breyel, D., Komnik, A., ... Weidemüller, M. (2014). Full Counting Statistics of Laser Excited Rydberg Aggregates in a One-Dimensional Geometry. *Physical Review Letters*, 112(1), 013002, doi:10.1103/PhysRevLett.112.013002

Schippers, S., Ricz, S., Buhr, T., Borovik Jr, A., Hellhund, J., Holste, K., ... Müller, A. (2014). Absolute cross sections for photoionization of Xe^{q+} ions ($1 \leq q \leq 5$) at the 3d ionization threshold. *Journal of Physics B*, 47(11), 115602, doi:10.1088/0953-4075/47/11/115602

Schmidt, D., Schwetz-Mangold, T., & Zhang, H. (2014). Status of the Zee-Babu model for neutrino mass and possible tests at a like-sign linear collider. *Nuclear Physics B*, 885, 524–541. doi:10.1016/j.nuclphysb.2014.05.024

Schnorr, K., Senftleben, A., Kurka, M., Rudenko, A., Schmid, G., Pfeifer, T., ... Moshammer, R. (2014). Electron Rearrangement Dynamics in Dissociating I^{n+}_2 Molecules Accessed by Extreme Ultraviolet Pump-Probe Experiments. *Physical Review Letters*, 113(7), 073001, doi:10.1103/PhysRevLett.113.073001

Schnorr, K., Senftleben, A., Schmid, G., Rudenko, A., Kurka, M., Meyer, K., ... Moshammer, R. (2014). Multiple ionization and fragmentation dynamics of molecular iodine studied in IR-XUV pump-probe experiments. *Faraday Discussions*, 171, 41–56. doi:10.1039/c4fd00031e

Schönleber, D. W., Gärttner, M., & Evers, J. (2014). Coherent versus incoherent excitation dynamics in dissipative many-body Rydberg systems. *Physical Review A*, 89(3), 033421, doi:10.1103/PhysRevA.89.033421

Schultz, B. E., Brodeur, M., Andreoiu, C., Bader, A., Chaudhuri, A., Chowdhury, U., ... Dilling, J. (2014). Precision Q_{EC} -value measurement of ^{23}Mg for testing the Cabibbo-Kobayashi-Maskawa matrix unitarity. *Physical Review C*, 90(1), 012501(R), doi:10.1103/PhysRevC.90.012501

Seng, C.-Y., de Vries, J., Mereghetti, E., Patel, H., & Ramsey-Musolf, M. (2014). Nucleon electric dipole moments and the isovector parity- and time-reversal-odd pion–nucleon coupling. *Physics Letters B*, 736, 147–153. doi:10.1016/j.physletb.2014.07.014

Sharma, V., Camus, N., Fischer, B., Kremer, M., Rudenko, A., Bergues, B., ... Moshammer, R. (2014). Attosecond-correlated dynamics of two electrons in argon. *Pramana-Journal of Physics*, 82(1), 79–85. doi:10.1007/s12043-013-0645-x

Shornikov, A., Krantz, C., & Wolf, A. (2014). Low cryogen inventory, forced flow Ne cooling system with room temperature compression stage and heat recuperation. *Cryogenics*, 59, 7–11. doi:10.1016/j.cryogenics.2013.12.001

Shornikov, A., Orlov, D. A., Krantz, C., Jaroshevich, A. S., & Wolf, A. (2014). Maximum intensity, transmission limited cold electron beams from GaAs photocathode in the eV and sub-eV kinetic energy range. *Physical Review Special Topics-Accelerators and Beams*, 17, 042802, doi:10.1103/PhysRevSTAB.17.042802

- Shuai, P., Xu, H. S., Tu , X. L., Zhang, Y. H., Sun, B. H., Wang, M., ... Zhan, W. L. (2014). Charge and frequency resolved isochronous mass spectrometry and the mass of ^{51}Co . *Physics Letters B*, 735, 327–331. doi:10.1016/j.physletb.2014.06.046
- Simgen, H., Arnold, F., Aufmhoff, H., Baumann, R., Kaether, F., Lindemann, S., ... Schumann, U. (2014). Detection of ^{133}Xe from the Fukushima nuclear power plant in the upper troposphere above Germany. *Journal of Environmental Radioactivity*, 132, 94–99. doi:10.1016/j.jenvrad.2014.02.002
- Simgen, H., Heusser, G., Laubenstein, M., & Zuzel, G. (2014). Analysis of radioactive trace impurities with μBq -sensitivity in Borexino. *International Journal of Modern Physics A*, 29(16), 1442009, doi:10.1142/S0217751X14420093
- Simon, V. V., Chaudhuri, A., Chowdhury, U., Gallant, A. T., Kwiatkowski, A. A., Lennarz, A., ... Dilling, J. (2014). Precision mass spectrometry of highly charged ions with TITAN Status and outlook. *Hyperfine Interactions*, 227(1-3), 239–246. doi:10.1007/s10751-014-1020-0
- Skoromnik, O., & Feranchuk, I. D. (2014). Justification of the single-mode approximation for a finite-duration laser pulse interacting with an electron . *Journal of Physics B*, 47(11), 115601, doi:10.1088/0953-4075/47/11/115601
- Smorra, C., Blaum, K., Franke, K., Matsuda, Y., Mooser, A., Nagahama, H., ... Ulmer, S. (2014). Towards a high-precision measurement of the antiproton magnetic moment. *Hyperfine Interactions*, 228(1-3), 31–36. doi:10.1007/s10751-014-1018-7
- Spruck, K., Badnell, N. R., Krantz, C., Novotný, O., Becker, A., Bernhardt, D., ... Schippers, S. (2014). Recombination of W^{18+} ions with electrons: Absolute rate coefficients from a storage-ring experiment and from theoretical calculations. *Physical Review A*, 90(3), 032715, doi:10.1103/PhysRevA.90.032715
- Stern, S., Holmegaard, L., Filsinger, F., Rouzée, A., Rudenko, A., Johnsson, P., ... Küpper, J. (2014). Toward atomic resolution diffractive imaging of isolated molecules with X-ray free-electron lasers . *Faraday Discussions*, 171, 393–418. doi:10.1039/C4FD00028E
- Streubel, S., Eronen, T., Höcker, M., Ketter, J., Schuh, M., Van Dyck, R. S. J., & Blaum, K. (2014). Toward a more accurate Q value measurement of tritium: status of THe-Trap. *Applied Physics B: Lasers and Optics*, 114(1-2), 137–145. doi:10.1007/s00340-013-5669-x
- Sturm, S., Köhler , F., Zatorski, J., Harman, Z., Werth, G., Keitel, C. H., & Blaum, K. (2014). High-precision measurement of the atomic mass of the electron. *Nature*, 506(7489), 467–470. doi:10.1038/nature13026
- Takamori, Y., Okawa, H., Takamoto, M., & Suwa, Y. (2014). An Alternative Numerical Method for the Stationary Pulsar Magnetosphere. *Publications of the Astronomical Society of Japan*, 66(1), 25, doi: 10.1093/pasj/pst026
- Takamoto, M., Kisaka, S., Suzuki, T. K., & Terasawa, T. (2014). The Evolution of High-temperature Plasma in Magnetar Magnetospheres and its Implications for Giant Flares . *Astrophysical Journal*, 787(1), 84, doi:10.1088/0004-637X/787/1/84
- Tamburini, M., Di Piazza, A., Liseykina, T. V., & Keitel, C. H. (2014). Plasma-Based Generation and Control of a Single Few-Cycle High-Energy Ultrahigh-Intensity Laser Pulse. *Physical Review Letters*, 113(2), 025005 , doi:10.1103/PhysRevLett.113.025005
- Tamburini, M., Keitel, C. H., & Di Piazza, A. (2014). Electron dynamics controlled via self-interaction. *Physical Review E*, 89(2), 021201, doi:10.1103/PhysRevE.89.021201
- Taylor, A. M., Gabici, S., & Aharonian, F. A. (2014). A Galactic Halo Origin of the Neutrinos Detected by Ice-Cube. *Physical Review D*, 89(10), 103003, doi:10.1103/PhysRevD.89.103003
- Ulmer, S., Mooser , A., Blaum, K., Braeuninger, S., Franke, K., Kracke, H., ... Yamazaki, Y. (2014). The magnetic moments of the proton and the antiproton. *Journal of Physics: Conference Series*, 488(Section1),

Vendrell, O., Küpper, J., Wolf, M., Chapman, H., Chergui, M., Reid, K., ... Rolles, D. (2014). Chemical reaction dynamics I and electron dynamics in molecules: general discussion . *Faraday Discussions*, 171, 145–168. doi:10.1039/C4FD90014F

Voitkiv, A. B., & Ma , X. (2014). Reply to “Comment on ‘Dynamics of transfer ionization in fast ion-atom collisions’ .” *Physical Review A*, 89(3), 036702. doi:10.1103/PhysRevA.89.036702

Vulcani, B., Bamford, S. P., Häußler, B., Vika, M., Rojas, A., Agius, N. K., ... Tuffs, R. (2014). Galaxy And Mass Assembly (GAMA): the wavelength-dependent sizes and profiles of galaxies revealed by MegaMorph. *Monthly Notices of the Royal Astronomical Society*, 441, 1340–1362. doi:10.1093/mnras/stu632

Weidenmüller, H. A. (2014). Open problems in applying random-matrix theory to nuclear reactions . *Journal of Physics G: Nuclear and Particle Physics*, 41(9), 094010, doi:10.1088/0954-3899/41/9/094010

Weyland, M., Ren, X., Pflüger, T., Baek, W. Y., Bartschat, K., Zatsarinny, O., ... Dorn, A. (2014). Novel method for state selective determination of electron-impact-excitation cross sections from 0° to 180°. *EPJ - Techniques and Instrumentation* , 1(1), 6, doi:10.1140/epjti/s40485-014-0006-2

Wolter, B., Lemell, C., Baudisch, M., Pullen, M. G., Tong, X.-M., Hemmer, M., ... Burgdörfer, and J. (2014). Formation of very-low-energy states crossing the ionization threshold of argon atoms in strong mid-infrared fields. *Physical Review A*, 90(6), 063424, doi:10.1103/PhysRevA.90.063424

Xu , X., He, H.-J., & Rodejohann, W. (2014). Constraining Astrophysical Neutrino Flavor Composition from Leptonic Unitarity. *Journal of Cosmology and Astroparticle Physics*, 2014(12), 039, doi:10.1088/1475-7516/2014/12/039

Xue, Y., Ginzel, R., Krauss, A., Bernitt, S., Schöffler, M., Kühnel, K. U., ... Fischer, D. (n.d.). Kinematically complete study of electron transfer and rearrangement processes in slow Ar¹⁶⁺ -Ne collisions. *Physical Review A*, 90(05), 052720, doi:10.1103/PhysRevA.90.052720

Yakaboylu, E., Klaiber, M., & Hatsagortsyan, K. Z. (2014). The Wigner time delay for laser induced tunnel-ionization via the electron propagator. *Physical Review A*, 90(1), 012116 , doi:10.1103/PhysRevA.90.012116

Yakaboylu, E., Hatsagortsyan, K. Z., & Keitel, C. H. (2014). Quasiclassical propagator of a relativistic particle via the path-dependent gauge potential. *Physical Review A*, 89(3), 032115, doi:10.1103/PhysRevA.89.032115

Yang, R., Aharonian, F. A., & Crocker, R. (2014). The Fermi Bubbles Revisited. *Astrophysics & Astronomy*, 567, A19, doi:10.1051/0004-6361/201423562

Yang, B., Novotny, O., Krantz, C., Buhr, H., Mendes, M. B., Nordhorn, C., ... Wolf, A. (2014). Exploring high-energy doubly excited states of NH by dissociative recombination of NH⁺. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 47(3), 035201, doi:10.1088/0953-4075/47/3/035201

Yang, R., Zhang, X., Yuan, Q., & Liu, S. (2014). Fermi Large Area Telescope observations of the supernova remnant HESS J1731-347 . *Astronomy and Astrophysics*, 567, A23, doi:10.1051/0004-6361/201322737

Yang, R., de Ona Wilhelmi, E., & Aharonian, F. (2014). Probing Cosmic Rays in Nearby Giant Molecular Clouds with the Fermi Large Area Telescope. *Astronomy and Astrophysics*, 566, A412. doi:10.1051/0004-6361/201321044

Zawatzky , K., Herwig, P., Grieser, M., Heber, O., Jordon-Thaden, B., Krantz, C., ... Trapp, O. (2014). Coulomb Explosion Imaged Cryptochiral (R,R)-2,3-Dideuterooxirane: Unambiguous Access to the Absolute Configuration of (+)-Glyceraldehyde. *Chemistry - A European Journal*, 20(19), 5555–5558. doi:10.1002/chem.201400296

Zhang, S., Fischer, D., Schulz, M., Voitkiv, A. B., Senftleben, A., Dorn, A., ... Moshammer, R. (2014). Two-Center Interferences in Dielectronic Transitions in H₂⁺ + He Collisions. *Physical Review Letters*, 112(02), 023201, doi:10.1103/PhysRevLett.112.023201

Zhang, W., Tu X.L., X. L., Wang, M., Zhang, Y. H., Xu, H. S., Litvinov, Y. A., ... Zhao, T. . (2014). A timing detector with pulsed high-voltage power supply for mass measurements at CSRe. *Nuclear Instruments and Methods in Physics Research Section A*, 755, 38–43. doi:10.1016/j.nima.2014.04.031

Zhang, W., Tu, X. L., Wang, M., Zhang, Y. H., Xu, H. S., Litvinov, Y. A., ... Zhou, X. H. (2014). Time-of-flight detectors with improved timing performance for isochronous mass measurements at the CSRe. *Nuclear Instruments and Methods in Physics Research Section A*, 756, 1–5. doi:10.1016/j.nima.2014.04.051

Zhang, L., & Evers, J. (2014). Diffractionless image propagation and frequency conversion via four-wave mixing exploiting the thermal motion of atoms . *Physical Review A*, 89(1), 013817, doi:10.1103/PhysRevA.89.013817

Zhang, L., & Evers, J. (2014). Uniform phase modulation via control of refractive index in a thermal atom vapor with vanishing diffraction or absorption. *Physical Review A*, 90(2), 023826, doi:10.1103/PhysRevA.90.023826

Zhang, S., Ma, X., & Voitkiv, A. B. (2014). Interference in dielectronic transitions in H_2^+ +He collisions. *Physical Review A*, 90(2), 022706, doi:10.1103/PhysRevA.90.022706

Zhang, S. F., Zhu, X. L., Voitkiv, A. B., Feng, W. T., Guo, D. L., Gao, Y., ... Ma, X. (2014). Mutual ionization in atomic collisions near the electronic threshold. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 47(10), 105202, doi:10.1088/0953-4075/47/10/105202

Zirakashvili, V. N., Aharonian, F. A., Yang, R., Ona-Wilhelmi, E., & Tuffs, R. J. (2014). Nonthermal radiation of young supernova remnants: the case of Cas A. *Astrophysical Journal*, 785(2), 130. doi:10.1051/0004-6361/201321044

Conference Papers 2014

- Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2014). Upgrade of the GERDA experiment . In GERDA Collaboration (Ed.), *Proceedings of Science* (Vol. TIPP2014,). Amsterdam, the Netherlands.
- Amaro, P., Shah, C., Tashenov, S., Beilmann, C., Bennett, S., Crespo López-Urrutia, J. R., ... Surzhykov, A. (2014). Measurement of the angular distribution of Dielectronic Recombination into highly charged Krypton ions. In *Journal of Physics: Conference Series* (Vol. 488,). Bristol, UK: IOP Publishing. doi:10.1088/1742-6596/488/6/062030
- Augustin, S., & Müller, C. (2014). Nonlinear Bethe-Heitler Pair Creation in an Intense Two-Mode Laser Field. In *Journal of Physics: Conference Series* (1st ed., Vol. 497 ,). Bristol: IOP Publishing. doi:10.1088/1742-6596/497/1/012020
- Bernloehr, K. (2014). Simulations of detector arrays and the impact of atmospheric parameters. In *Proceedings of the Atmospheric Monitoring for High-Energy Astroparticle Detectors (AtmoHEAD) Conference* (). Saclay, France.
- Bernloehr, K., Bellassai, G., Blanch, O., Bourgeat, M., Bruno, P., Buscemi, M., ... Will, M. (2014). Atmospheric Monitoring for High-Energy Astroparticle Detectors. In *Proceedings of the Atmospheric Monitoring for High-Energy Astroparticle Detectors (AtmoHEAD) Conference* (). Saclay, France.
- Blouw, J. (2014). Quarkonia and heavy flavor in pPb at LHCb. In on behalf of the LHCb Collaboration (Ed.), *Nuclear Physics B* (Vol. 926, pp. 49–57). Amsterdam: North-Holland.
- Britsch, M. (2014). Overview of LHCb results on CP violation. In on behalf of the LHCb Collaboration (Ed.), *EPJ Web of Conferences* (Vol. 71,). Les Ulis: EDP Sciences. doi:10.1051/epjconf/20147100021
- Bulgarelli, A., Fioretti, V., Zoli, A., Aboudan, A., Rodríguez-Vázquez, J. J., Maier, G., ... Weinstein, A. (2014). A prototype for the real-time analysis of the Cherenkov Telescope Array. In *Proceedings of SPIE* (Vol. 9145). Bellingham, Washington: SPIE.
- Chaves, R., Luft, L., Maciel, T., Gross, D., Janzing, D., & Schölkopf, B. (2014). Inferring latent structures via information inequalities. In N. Zhang & J. Tian (Eds.), *Proceedings of the 30th Conference on Uncertainty in Artificial Intelligence* (pp. 112–121). Corvallis, Oregon: AUAI Press.
- Fileviez Perez, P. (2014). Baryon and Lepton Numbers: Life in the Desert. In *Journal of Physics: Conference Series* (Vol. 485,). Bristol: IOP Publishing.
- Fontana, M. for the LHCb Collaboration (2014). B meson decays into neutral kaons in the LHCb experiment. *Il Nuovo Cimento C*, 037(1), 289-290.
- Fontana, M. for the LHCb Collaboration (2014). Charmless B decays: Dalitz. *Proceedings of Science*, Beauty2014: 020
- Förster, A. (2014). Gamma-ray astronomy with H.E.S.S. In On behalf of the H.E.S.S. Collaboration (Ed.), *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* (Vol. 766, pp. 69–76). Amsterdam: Elsevier B.V. doi:10.1016/j.nima.2014.05.038
- Gaug, M., Berge, D., Daniel , M., Doro, M., Förster , A., Hofmann, W., ... van Eldik, C. (2014). Calibration strategies for the Cherenkov Telescope Array . In *Proceedings of SPIE* (Vol. 9149). Bellingham, Washington: SPIE.
- Gouillon, J., Hubele, R., LaForge, A., Schulz, M., Wang, X., Najjari, B., ... Fischer, D. (2014). Ion-Li collision dynamics studied with a MOTReMi. In *Journal of Physics: Conference Series* (Vol. 488,). Lanzhou, China. doi:10.1088/1742-6596/488/8/082004

Hawkes, J., Rowell, G., Dawson, B., Aharonian, F. A., Burton, M., Fukui, Y., ... Walsh, A. (2014). Investigation of Dense Gas Towards Relativistic Outflow Sources. In *International Journal of Modern Physics: Conference Series* (Vol. 28,). Heidelberg, Germany: World Scientific. doi:10.1142/S2010194514601987

Khangulyan, D., Bogovalov, S., & Aharonian, F. A. (2014). Binary Pulsar System PSR B1259-63/LS2883 as a Gamma-Ray Emitter. In *International Journal of Modern Physics: Conference Series* (Vol. 28,). Heidelberg, Germany: World Scientific. doi:10.1142/S2010194514601690

King, B., & Di Piazza, A. (2014). Investigating the QED vacuum with ultra-intense laser fields. In *European Physical Journal-Special Topics* (6th ed., Vol. 223, pp. 1063–1068). doi:10.1140/epjst/e2014-02157-3

Knödlseder, J., Brau-Nogué, S., Deil, C., Lu, C.-C., Martin, P., Mayer, M., & Schulz, A. (2014). Cherenkov Telescope Array science data analysis using the ctools. In *Proceedings of SPIE* (Vol. 9152). Bellingham, Washington: SPIE.

Lu Chia-Chun, Aharonian, F. A., Brun, F., Chaves, R., Domainko, W., Hofmann, W., ... Voelk, H. J. (2014). H.E.S.S. Observations of The Large Magellanic Cloud. In *American Astronomical Society, HEAD meeting* (Vol. 14,).

Meyer, K., Ott, C. R., Raith, P., Kaldun, A., Jiang, Y., Senftleben, A., ... Pfeifer, T. (2014). Temporal resolution in pump–probe experiments enhanced by noisy pulses. In *Journal of Physics: Conference Series* (Vol. 488,). Bristol: IOP Publishing. doi:1742-6596/488/3/032037

Neitz, N., Kumar, N., Mackenroth, K. F., Hatsagortsyan, K. Z., Keitel, C. H., & Di Piazza, A. (2014). Novel aspects of radiation reaction in the classical and the quantum regime . In *Journal of Physics: Conference Series* (1st ed., Vol. 497,). Bristol: IOP Publishing. doi:10.1088/1742-6596/497/1/012015

Pacifico, N., Aghion, S., Ahlén, O., Belov, A. S., Bonomi, G., Bräunig, P., ... Zmeskal, J. (2014). Investigation of silicon sensors for their use as antiproton annihilation detectors. In *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment* (Vol. 765, pp. 161–166). Amsterdam: Elsevier B.V. doi:10.1016/j.nima.2014.06.036

Pühlhofer, G., Bauer, C., Eisenkolb, F., Florin, D., Föhr, C., Gadola, A., ... Zietara, K. (2014). Status of the photomultiplier-based FlashCam camera for the Cherenkov Telescope Array. In *Proceedings of SPIE* (Vol. 9145,). Bellingham, Washington: SPIE. doi:10.1117/12.2056837

Sahakyan, N., Rieger, F. M., Aharonian, F. A., Yang, R., & de Ona Wilhelmi, E. (2014). On the Gamma-Ray Emission from the Core and Radio Lobes of the Radio Galaxy Centaurus A. In *International Journal of Modern Physics: Conference Series* (Vol. 28,). Heidelberg, Germany: World Scientific. doi:10.1142/S2010194514601823

Stepaniuk, M., Nisi, S., & Balata, M. (2014). Hands on mass spectrometry: ICP-MS analysis of enriched ^{82}Se samples for the LUCIFER experiment. In *Proceedings of Science* (Vol. GSSI14). INFN - Laboratori Nazionali del Gran Sasso, Assergi, Italy.

Subieta Vasquez, M. A., Aghion, S., Ahlén, O., Amsler, C., Ariga, A., Ariga, T., ... Zavatarelli, S. (2014). AEgIS Experiment: Measuring the acceleration g of the earth's gravitational field on antihydrogen beam. In *EPJ Web of Conferences* (Vol. 71,). Les Ulis: EDP Sciences. doi:10.1051/epjconf/20147100128

Szanecki, M., Bernloehr, K., Sobczyńska, D., Niedźwiecki, A., Sitarek, J., & Bednarek , W. (2014). Geomagnetic field and altitude effects on the performance of future IACT arrays. In *ICRC 2013 proceedings* (). Rio de Janeiro, Brazil.

Takamoto, M. (2014). A New Numerical Scheme for Relativistic Magnetohydrodynamics with Dissipation and Its Application. In *8th International Conference of Numerical Modeling of Space Plasma Flows (ASTRONUM 2013)* (p. 267–). San Francisco: Astronomical Society of the Pacific.

Takamoto, M. (2014). Evolution of Plasmoid-Chain in Poynting-Dominates Plasma. In *International Journal of Modern Physics: Conference Series* (Vol. 28,). Heidelberg, Germany: World Scientific. doi:10.1142/

S2010194514601707

- Versolato, O., Schwarz, M., Hansen, A. K., Gingell, A. D., Windberger, A., Kłosowski, L., ... Drewsen, M. (2014). Lifetime Measurement of the First vibrationally Excited State of MgH⁺ in a Cryogenic Paul Trap (CryPTEEx). In *Precision Electromagnetic Measurements (CPEM 2014)* (pp. 56–57). Rio de Janeiro. doi:10.1109/CPEM.2014.6898256
- Voisin, F., Rowell, G., Fukui, Y., Burton, M., Walsh, A., & Aharonian, F. A. (2014). Mopra and Nanten Studies of HESS J1825-137 Northern Cloud. In *International Journal of Modern Physics: Conference Series* (Vol. 28,). Heidelberg, Germany: World Scientific. doi:10.1142/S2010194514601999
- Völk, H. J. (2014). Cosmic-ray driven winds. In *Proceedings of Science* (Vol. CRSIM2014,). Montpellier, France.
- Weitzel, Q., Bauer, C., Eisenkolb, F., Florin, D., Föhr, C., Gadola, A., ... Zietara, K. (2014). The FlashCam Camera for the Medium-Sized Telescopes of CTA. In For the CTA Consortium (Ed.), *Proceedings of Science* (Vol. PoS(TIPP2014),). Amsterdam, the Netherlands.
- Zabalza, V. (2014). Gamma-Ray Observations of Gamma-Ray Binaries. In *International Journal of Modern Physics : Conference Series* (Vol. 28 ,). Heidelberg, Germany: World Scientific. doi:10.1142/S2010194514601616
- Zhang, Y., Meyer, K., Ott, C. R., & Pfeifer, T. (2014). Passively phase-stable monolithic all-reflective two-dimensional electronic spectroscopy based on a 4-quadrant mirror. In *Journal of Physics: Conference Series* (Section 14 , Vol. 488,). Bristol: IOP Publishing. doi:10.1088/1742-6596/488/14/142001

Books and Book Chapters 2014

Crespo López-Urrutia, J. R., & Harman, Z. (2014). Emission and Laser Spectroscopy of Trapped Highly Charged Ions in Electron Beam Ion Traps. In: W. Quint & M. Vogel (Eds.), Fundamental Physics in Particle Traps (pp. 315–373). Berlin u.a.: Springer. doi:10.1007/978-3-642-45201-7_10

Meuren, S., Har-Shemesh, O., & Di Piazza, A. (2014). Tests of Classical and Quantum Electrodynamics with Intense Laser Fields (Vol. 10, pp. 111–135). Berlin: Springer-Verlag. doi:10.1007/978-3-319-00521-8_8

Povh, B., Rith, K., Scholz, C., Zetsche, F., & Rodejohann, W. (2014). Teilchen und Kerne : Eine Einführung in die physikalischen Konzepte. (9. Aufl.). Berlin: Springer Spektrum.

Sumiyoshi, T., Hallewell, G., Hofmann, W., Iijima, T., Križan, P., & Nappi, E. (Eds.). (2014). RICH2013 : Proceedings of the Eighth International Workshop on Ring Imaging Cherenkov Detectors Shonan. Amsterdam: Elsevier B.V.

Tibolla, O., Drury, L., Persic, M., Kaufmann, S., Voelk, H., Mannheim, K., & De Angelis, A. (Eds.). (2014). CRBTSM 2014: Cosmic Ray Origin – Beyond the Standard Models. Amsterdam: Elsevier.

Ulmer, S., & Smorra, C. (2014). The Magnetic Moments of the Proton and the Antiproton. In: W. Quint & M. Vogel (Eds.), Fundamental Physics in Particle Traps (pp. 165–201). Berlin u.a.: Springer. doi:10.1007/978-3-642-45201-7_5

Publications 2015

Journals Articles

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the Semileptonic CP Asymmetry in $B^0 - B^0$ Mixing. *Physical Review Letters*, 114(4), 041601. doi:10.1103/PhysRevLett.114.041601

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for CP violation in $D^0 \rightarrow \pi^- \pi^+ \pi^0$ decays with the energy test. *Physics Letters B*, 740, 158–167. doi:10.1016/j.physletb.2014.11.043

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the track reconstruction efficiency at LHCb. *Journal of Instrumentation*, 10, P02007. doi:10.1088/1748-0221/10/02/P02007

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Determination of γ and $-2\beta_s$ from charmless two-body decays of beauty mesons. *Physics Letters B*, 741, 1–11. doi:10.1016/j.physletb.2014.12.015

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Observation of Two New Ξ_b^- Baryon Resonances. *Physical Review Letters*, 114(6), 062004. doi:10.1103/PhysRevLett.114.062004

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for the lepton flavour violating decay $\tau^- \rightarrow \mu^- \mu^+ \mu^-$. *Journal of High Energy Physics : JHEP*, 2015(2), 121. doi:10.1007/JHEP02(2015)121

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the inelastic pp cross-section at a centre-of-mass energy of $\sqrt{s}=7$ TeV. *Journal of High Energy Physics : JHEP*, 2015(2), 129. doi:10.1007/JHEP02(2015)129

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the CP-violating phase β in $B^0 \rightarrow J/\psi \pi^+ \pi^-$ decays and limits on penguin effects. *Physics Letters B*, 742, 38–49. doi:10.1016/j.physletb.2015.01.008

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the lifetime of the B_c^+ meson using the $B_c^+ \rightarrow J/\psi \pi^+$ decay mode. *Physics Letters B*, 742, 29–37. doi:10.1016/j.physletb.2015.01.010

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). LHCb detector performance. *International Journal of Modern Physics A*, 30(7), 1530022. doi:10.1142/S0217751X15300227

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of B_c^+ Production in Proton-Proton Collisions at $\sqrt{s}=8$ TeV. *Physical Review Letters*, 114(13), 132001. doi:10.1103/PhysRevLett.114.132001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Precise measurements of the properties of the $B_1(5721)^{0,+}$ and $B_2^*(5747)^{0,+}$ states and observation of B^{+0}, π^{+} mass structures. *Journal of High Energy Physics : JHEP*, 2015(4), 024. doi:10.1007/JHEP04(2015)024

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Study of the rare B_s^0 and B^0 decays into the $\pi^+ \pi^- \mu^+ \mu^-$ final state. *Physics Letters B*, 743, 46–55. doi:10.1016/j.physletb.2015.02.010

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of indirect CP asymmetries in $D^0 \rightarrow K^- K^+$ and $D^0 \rightarrow \pi^- \pi^+$ decays using semileptonic B decays. *Journal of High Energy Physics : JHEP*, 2015(4), 043. doi:10.1007/JHEP04(2015)043

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Angular analysis of the $B^0 \rightarrow K^{*0} e^+ e^-$ decay in the low- q^2 region. *Journal of High Energy Physics : JHEP*, 2015(4), 064. doi:10.1007/JHEP04(2015)064

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for long-lived particles decaying to jet pairs. *European Physical Journal C*, 75(4), 152. doi:10.1140/epjc/s10052-015-3344-6

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). First observation and amplitude analysis of the $B^- \rightarrow D^+ K^- \pi^-$ decay. *Physical Review D*, 91(9), 092002. doi:10.1103/PhysRevD.91.092002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Determination of the branching fractions of $B_s^0 \rightarrow D_s^{*-} K_s^{*+}$ and $B^0 \rightarrow D_s^- K^+$. *Journal of High Energy Physics : JHEP*, 2015(5), 019. doi:10.1007/JHEP05(2015)019

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Identification of beauty and charm quark jets at LHCb. *Journal of Instrumentation*, 10, P06013. doi:10.1088/1748-0221/10/06/P06013

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Differential branching fraction and angular analysis of $\Lambda_b^0 \rightarrow \Lambda \mu^+ \mu^-$ decays. *Journal of High Energy Physics : JHEP*, 2015(6), 115. doi:10.1007/JHEP06(2015)115

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the time-dependent CP asymmetries in $B_s^0 \rightarrow J/\psi K_s^0$. *Journal of High Energy Physics : JHEP*, 2015(6), 131. doi:10.1007/JHEP06(2015)131

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). First observation and measurement of the branching fraction for the decay $B_s^0 \rightarrow D_s^{*\mp} K^\pm$. *Journal of High Energy Physics : JHEP*, 2015(6), 130. doi:10.1007/JHEP06(2015)130

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the $\eta_c(1S)$ production cross-section in proton–proton collisions via the decay $\eta_c(1S) \rightarrow pp$. *European Physical Journal C*, 75(7), 311. doi:10.1140/epjc/s10052-015-3502-x

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of CP Violation in $B^0 \rightarrow J/\psi K_s^0$ Decays. *Physical Review Letters*, 115(3), 031601. doi:10.1103/PhysRevLett.115.031601

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Amplitude analysis of $B^0 \rightarrow \bar{D}^0 K^+ \pi^-$ decays. *Physical Review D*, 92(1), 012012. doi:10.1103/PhysRevD.92.012012

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Observation of the decay $\bar{B}_s^0 \rightarrow \psi(2S) K^+ \pi^-$. *Physics Letters B*, 747, 484–494. doi:10.1016/j.physletb.2015.06.038

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Observation of the $B^0 \rightarrow p^0 \rho^0$ decay from an amplitude analysis of $B^0 \rightarrow (\pi^+ \pi^-)(\pi^+ \pi^-)$ decays. *Physics Letters B*, 747, 468–478. doi:10.1016/j.physletb.2015.06.027

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Quantum numbers of the $X(3872)$ state and orbital angular momentum in its $\rho^0 J/\psi$ decay. *Physical Review D*, 92(1), 011102. doi:10.1103/PhysRevD.92.011102

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for the decay $B_s^0 \rightarrow \bar{D}^0 f_0(980)$. *Journal of High Energy Physics : JHEP*, 2015(8), 005. doi:10.1007/JHEP08(2015)005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Dalitz

plot analysis of $B^0 \rightarrow \bar{D}^0 \pi^+ \pi^-$ decays. *Physical Review D*, 92(3), 032002. doi:10.1103/PhysRevD.92.032002

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the forward Z boson production cross-section in pp collisions at $\sqrt{s}=7$ TeV. *Journal of High Energy Physics : JHEP*, 2015(8), 039. doi:10.1007/JHEP08(2015)039

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Observation of $J/\psi p$ Resonances Consistent with Pentaquark States in $\Lambda_b^0 \rightarrow J/\psi K p$ Decays. *Physical Review Letters*, 115(7), 072001. doi:10.1103/PhysRevLett.115.072001

Aaij, R., Adeva, B., Adinolfi, M., Older, A. A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Determination of the quark coupling strength vertical $|V_{ub}|$ using baryonic decays. *Nature Physics*, 11(9), 743–747. doi:10.1038/NPHYS3415

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for the $\Lambda_b^0 \rightarrow \Lambda\eta'$ and $\Lambda_b^0 \rightarrow \Lambda\eta$ decays with the LHCb detector. *Journal of High Energy Physics : JHEP*, 2015(9), 006. doi:10.1007/JHEP09(2015)006

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). First Observation of Top Quark Production in the Forward Region. *Physical Review Letters*, 115(11), 112001. doi:10.1103/PhysRevLett.115.112001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the exclusive gamma production cross-section in pp collisions at $\sqrt{s}=7$ TeV and 8 TeV. *Journal of High Energy Physics : JHEP*, 2015(9), 084. doi:10.1007/JHEP09(2015)084

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Angular analysis and differential branching fraction of the decay $B_s^0 \rightarrow \phi\mu^+\mu^-$. *Journal of High Energy Physics : JHEP*, 2015(9), 179. doi:10.1007/JHEP09(2015)179

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). B flavour tagging using charm decays at the LHCb experiment. *Journal of Instrumentation*, 10, P10005. doi:10.1088/1748-0221/10/10/P10005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). First measurement of the differential branching fraction and CP asymmetry of the $B^\pm \rightarrow \pi^\pm \mu^+ \mu^-$ decay. *Journal of High Energy Physics : JHEP*, 2015(10), 034. doi:10.1007/JHEP10(2015)034

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the $B_s^0 \rightarrow \phi\phi$ branching fraction and search for the decay $B^0 \rightarrow \phi\phi$. *Journal of High Energy Physics : JHEP*, 2015(10), 053. doi:10.1007/JHEP10(2015)053

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the time-integrated CP asymmetry in $D^0 \rightarrow K_s^0 K_s^0$ decays. *Journal of High Energy Physics : JHEP*, 2015(10), 055. doi:10.1007/JHEP10(2015)055

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the branching fraction ratio $B(B_c^+ \rightarrow \psi(2S)\pi^+)/B(B_c^+ \rightarrow J/\psi\pi^+)$. *Physical Review D*, 92(7), 072007. doi:10.1103/PhysRevD.92.072007

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of CP violation parameters and polarisation fractions in $B_s^0 \rightarrow J/\psi K^{*0}$ decays. *Journal of High Energy Physics : JHEP*, 2015(11), 082. doi:10.1007/JHEP11(2015)082

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Forward production of Upsilon mesons in pp collisions at $\sqrt{s}=7$ and 8 TeV. *Journal of High Energy Physics : JHEP*, 2015(11), 103, 1–34. doi:10.1007/JHEP11(2015)103

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Mea-

surement of the forward-backward asymmetry in $Z/\gamma^* \rightarrow \mu^+ \mu^-$ decays and determination of the effective weak mixing angle. *Journal of High Energy Physics : JHEP*, 2015(11), 190. doi:10.1007/JHEP11(2015)190

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for the rare decays $B^0 \rightarrow J/\psi\gamma$ and $B_s^0 \rightarrow J/\psi\gamma$. *Physical Review D*, 92(11), 112002. doi:10.1103/PhysRevD.92.112002

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2015). Evidence for the Strangeness-Changing Weak Decay $\Xi_b^- \rightarrow \Lambda_b^0 \pi^-$. *Physical Review Letters*, 115(24), 241801. doi:10.1103/PhysRevLett.115.241801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for long-lived heavy charged particles using a ring imaging Cherenkov technique at LHCb. *European Physical Journal C - Particles and Fields*, 75(12), 595. doi:10.1140/epjc/s10052-015-3809-7

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Study of $B^- \rightarrow DK^-\pi^+\pi^-$ and $B^- \rightarrow D\pi^-\pi^+\pi^-$ decays and determination of the CKM angle γ . *Physical Review D*, 92(11), 112005. doi:10.1103/PhysRevD.92.112005

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). A model-independent confirmation of the $Z(4430)^-$ state. *Physical Review D*, 92(11), 112009. doi:10.1103/PhysRevD.92.112009

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Search for hidden-sector bosons in $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ decays. *Physical Review Letters*, 115(16), 161802. doi:10.1103/PhysRevLett.115.161802

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of the ratio of branching fractions $B(\bar{B}^0 \rightarrow D^*+\tau^-\bar{\nu}_\tau)/B(\bar{B}^0 \rightarrow D^*+\mu^-\bar{\nu}_\mu)$. *Physical Review Letters*, 115(11), 111803. doi:10.1103/PhysRevLett.115.111803

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Study of W boson production in association with beauty and charm. *Physical Review D*, 92(5), 052001. doi:10.1103/PhysRevD.92.052001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Study of CP violation in $B^\mp \rightarrow Dh^\mp$ ($h=K,\pi$) with the modes $D \rightarrow K^\mp \pi^+ \pi^0$, $D \rightarrow \pi^+ \pi^- \pi^0$ and $D \rightarrow K^+ K^- \pi^0$. *Physical Review D*, 91(11), 112014. doi:10.1103/PhysRevD.91.112014

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of forward $Z \rightarrow e^+ e^-$ production at $\sqrt{s}=8$ TeV. *Journal of High Energy Physics : JHEP*, 2015(05), 109. doi:10.1007/JHEP05(2015)109

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Measurement of CP asymmetries and polarisation fractions in $B_s^0 \rightarrow K^{*0} \bar{K}^{*0}$ decays. *Journal of High Energy Physics : JHEP*, 2015(07), 166. doi:10.1007/JHEP07(2015)166

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Precision Measurement of CP Violation in $B_s^0 \rightarrow J/\Psi K^+ K^-$ Decays. *Physical Review Letters*, 114(4), 041801. doi:10.1103/PhysRevLett.114.041801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). $B_s^0 \rightarrow \eta' \eta'$ decay. *Physical Review Letters*, 115(5), 051801. doi:10.1103/PhysRevLett.115.051801

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Study of $\eta-\eta'$ mixing from measurement of $B_{(s)}^0 \rightarrow J/\psi \eta'$ decay rates. *Journal of High Energy Physics : JHEP*, 2015(01), 024. doi:10.1007/JHEP01(2015)024

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2015). Mea-

surement of the Z+b-jet cross-section in pp collisions at $\sqrt{s}=7$ TeV in the forward region. *Journal of High Energy Physics : JHEP*, 2015(01), 064. doi:10.1007/JHEP01(2015)064

Abdallah, J., Araujo, H., Arbey, A., Ashkenazi, A., Belyaev, A., Berger, J., ... Zurek, K. (2015). Simplified models for dark matter searches at the LHC. *Physics of the Dark Universe*, 9-10, 8–23. doi:10.1016/j.dark.2015.08.001

Abe, Y., dos Anjos, J. C., Barriere, J. C., Baussan, E., Bekman, I., Bergevin, M., ... Zimmer, V. (2015). Improved measurements of the neutrino mixing angle θ_{13} with the Double Chooz detector (vol 10, 086, 2014). *Journal of High Energy Physics : JHEP*, 2015(2), 074. doi:10.1007/JHEP02(2015)074

Abramowski, A., Aharonian, F. A., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Yoshiike, S. (2015). Probing the gamma-ray emission from HESS J1834–087 using H.E.S.S. and Fermi LAT observations. *Astronomy and Astrophysics*, 574, A27, -. doi:10.1051/0004-6361/201322694

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E., ... Zechlin, H.-S. (2015). H.E.S.S. reveals a lack of TeV emission from the supernova remnant Puppis A. *Astronomy and Astrophysics*, 575, A81. doi:10.1051/0004-6361/201424805

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Zechlin, H.-S. (2015). The exceptionally powerful TeV γ -ray emitters in the Large Magellanic Cloud. *Science*, 347(6220), 406–412. doi:10.1126/science.1261313

Abramowski, A., Aharonian, F., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Źywucka, N. (2015). Discovery of variable VHE gamma-ray emission from the binary system 1FGL J1018.6-5856. *Astronomy and Astrophysics*, 577, A131. doi:10.1051/0004-6361/201525699

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E., Anton, G., ... Horan, D. (2015). The high-energy gamma-ray emission of AP Librae. *Astrophysics & Astronomy*, 573, A31. doi:10.1051/0004-6361/201321436

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguner, E. O., Backes, M., ... Zechlin, H.-S. (2015). HESS detection of TeV emission from the interaction region between the supernova remnant G349.7+0.2 and a molecular cloud. *Astrophysics & Astronomy*, 574, A100. doi:10.1051/0004-6361/201425070

Abramowski, A., Acero, F., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguner, E., ... Zechlin, H.-S. (2015). Discovery of the VHE gamma-ray source HESS J1832-093 in the vicinity of SNR G22.7-0.2. *Monthly Notices of the Royal Astronomical Society*, 446(2), 1163–1169. doi:10.1093/mnras/stu2148

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E., Anton, G., ... Uchiyama, Y. (2015). Probing the gamma-ray emission from HESS J1834-087 using HESS and Fermi LAT observations. *Astrophysics & Astronomy*, 574, A27. doi:10.1051/0004-6361/201322694

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E. O., Backes, M., ... Zechlin, H.-S. (2015). Constraints on an Annihilation Signal from a Core of Constant Dark Matter Density around the Milky Way Center with HESS. *Physical Review Letters*, 114(8), 081301. doi:10.1103/PhysRevLett.114.081301

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E. O., Backes, M., ... Zechlin, H.-S. (2015). HESS reveals a lack of TeV emission from the supernova remnant Puppis . *Astrophysics & Astronomy*, 575, A81. doi:10.1051/0004-6361/2014424805

Abramowski, A., Aharonian, F. A., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E. O., Backes, M., ... Zechlin, H.-S. (2015). The 2012 Flare of PG 1553+113 Seen with H.E.S.S. and Fermi-LAT . *Astrophysical Journal*, 802(1), 65. doi:10.1088/0004-637X/802/1/65

Acharya, B. S., Aramo, C., Babic, A., Barrio, J. A., Baushev, A., Tjus, J. B., ... Yoshikoshi, T. (2015). The Cherenkov Telescope Array potential for the study of young supernova remnants. *Astroparticle Physics*, 62,

152–164. doi:10.1016/j.astropartphys.2014.08.005

Ackermann, M., Ajello, M., Allafort, A., Antolini, E., Atwood, W. B., Axelsson, M., ... Zimmer, S. (2015). Erratum: “The Second Catalog of Active Galactic Nuclei Detected by the Fermi Large Area Telescope” (2011, ApJ, 743, 171) . *Astrophysical Journal*, 806(1), 144. doi:10.1088/0004-637X/806/1/144

Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A. S., Bonomi, G., ... Zmeskal, J. (2015). Positron bunching and electrostatic transport system for the production and emission of dense positronium clouds into vacuum. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 362, 86–92. doi:10.1016/j.nimb.2015.08.097

Agostini, M., Allardt, M., Andreotti, E., Bakalyarov, A. M., Balata, M., Barabanov, I., ... Zuzel, G. (2015). Production, characterization and operation of ^{76}Ge enriched BEGe detectors in GERDA. *European Physical Journal C - Particles and Fields*, 75, 39, -. doi:10.1140/epjc/s10052-014-3253-0

Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., Bonfini, G., ... Zuzel, G. (2015). Spectroscopy of geoneutrinos from 2056 days of Borexino data. *Physical Review D*, 92(3), 031101. doi:10.1103/PhysRevD.92.031101

Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2015). Results on $\beta\beta$ decay with emission of two neutrinos or Majorons in ^{76}Ge -76 from GERDA Phase I. *European Physical Journal C*, 75(9), 416. doi:10.1140/epjc/s10052-015-3627-y

Agostini , M., Barnabe-Heider, M., Budjas, D., Cattadori, C., Gangapshev, A., Gusev, K., ... Zuzel, G. (2015). LArGe: active background suppression using argon scintillation for the GERDA 0v $\beta\beta$ -experiment. *European Physical Journal C*, 75(10), 506. doi:10.1140/epjc/s10052-015-3681-5

Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2015). 2v $\beta\beta$ decay of ^{76}Ge into excited states with GERDA phase I. *Journal of Physics G: Nuclear and Particle Physics*, 42(11), 115201. doi:10.1088/0954-3899/42/11/115201

Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., Bonfini, G., ... Zuzel, G. (2015). Test of Electric Charge Conservation with Borexino. *Physical Review Letters*, 115(23), 231802. doi:10.1103/PhysRevLett.115.231802

Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2015). Improvement of the Energy Resolution via an Optimized Digital Signal Processing in GERDA Phase I. *European Physical Journal C*, 75, 255. doi:10.1140/epjc/s10052-015-3409-6

Akber, A., Reed, M. W., Walker, P. M., Litvinov, Y. A., Lane, G. J., Kibédi, T., ... Yamaguchi, T. (2015). Increased isomeric lifetime of hydrogen-like ^{192m}Os . *Physical Review C*, 91(3), 031301(R). doi:10.1103/PhysRevC.91.031301

Ali, E., Ren, X., Dorn, A., Ning, C., & Madison, D. (2015). Experimental and theoretical study of electron-impact ionization plus excitation of aligned H₂. *Journal of Physics B*, 48(11), 115201. doi:10.1088/0953-4075/48/11/115201

Alpaslan, M., Driver, S., Robotham, A. S. G., Obreschkow, D., Andrae, E., Cluver, M., ... Tuffs, R. J. (2015). Galaxy And Mass Assembly (GAMA): trends in galaxy colours, morphology, and stellar populations with large-scale structure, group, and pair environments. *Monthly Notices of the Royal Astronomical Society*, 451(3), 3249–3268. doi:10.1093/mnras/stv1176

Alves , A., Berlin, A., Profumo , S., & Queiroz, F. (2015). Dirac-fermionic dark matter in U(1)_X models. *Journal of High Energy Physics : JHEP*, 2015(10), 076. doi:10.1007/JHEP10(2015)076

Aprile, E., Aalbers, J., Agostini, F., Alfonsi, M., Anthony, M., Arazi, L., ... Zhang, Y. (2015). Search for Event Rate Modulation in XENON100 Electronic Recoil Data. *Physical Review Letters*, 115(9), 091302. doi:10.1103/PhysRevLett.115.091302

Aprile, E., Agostini, F., Alfonsi, M., Arazi, L., Arisaka, K., Arneodo, F., ... Laubenstein, M. (2015). Lowering the radioactivity of the photomultiplier tubes for the XENON1T dark matter experiment. *European Physical Journal C*, 75(11), 546. doi:10.1140/epjc/s10052-015-3657-5

Aprile, E., Agostini, F., Alfonsi, M., Arazi, L., Arisaka, K., ... Weinheimer, C. (2015). Exclusion of Leptophilic Dark Matter Models using XENON100 Electronic Recoil Data. *Science*, 349(6250), 851–854. doi:10.1126/science.aab2069

Arbo, D. G., Lemell, C., Nagele, S., Camus, N., Fechner, L., Krupp , A., ... Burgdoerfer, J. (2015). Ionization of argon by two-color laser pulses with coherent phase control. *Physical Review A*, 92(2), 023402. doi:10.1103/PhysRevA.92.023402

Argenti, L., Jimenez-Galan, A., Marante, C., Ott, C. R., Pfeifer, T., & Martin, F. (2015). Dressing Effects in the Attosecond Transient Absorption Spectra of Doubly Excited States in Helium. *Physical Review A*, 91(06), 061403(R). doi:10.1103/PhysRevA.91.061403

Atanasov, D., Blaum, K., Bosch, F., Brandau, C., Bühler, P., Chen, X., ... Zhang, Y. (2015). Between atomic and nuclear physics: radioactive decays of highly-charged ions. *Journal of Physics B*, 48(14), 144024. doi:10.1088/0953-4075/48/14/144024

Atanasov, D., Ascher, P., Blaum, K., Cakirli, R. B., Cocolios, T. E., George, S., ... Zuber, K. (2015). Precision Mass Measurements of $^{129-131}\text{Cd}$ and Their Impact on Stellar Nucleosynthesis via the Rapid Neutron Capture Process. *Physical Review Letters*, 115(23), 232501. doi:10.1103/PhysRevLett.115.232501

Audi, G., Blaum, K., Block, M., Bollen, G., Goriely, S., Hardy, J. C., ... Zhang, Y. H. (2015). Comment on “Atomic mass compilation 2012” by B. Pfeiffer, K. Venkataramiah, U. Czok, C. Scheidenberger. *Atmic Data and Nuclear Data Tables*, 103-104, 1–3. doi:10.1016/j.adt.2014.05.003

Babcock, C., Heylen, H., Billowes, J., Bissell, M. L., Blaum, K., Campbell, P., ... Yordanov, D. T. (2015). Evidence for Increased neutron and proton excitations between $^{51-63}\text{Mn}$. *Physics Letters B*, 750, 176–180. doi:10.1016/j.physletb.2015.09.012

Bekker, H., Versolato, O. O., Windberger, A., Oreshkina, N., Schupp, R., Baumann, T. M., ... Crespo Lopez-Urrutia, J. (2015). Identifications of $5\text{s}_{1/2}-5\text{p}_{3/2}$ and $5\text{s}^2-5\text{s}5\text{p}$ EUV transitions of promethium-like Pt, Ir, Os and Re. *Journal of Physics B*, 48(14), 144018. doi:10.1088/0953-4075/48/14/144018

Bekker, H., Windberger, A., Versolato, O. O., Binder, M., Klawitter, R., & Crespo López-Urrutia, J. R. (2015). Forbidden optical transition in Ti-like Xe, Ba, and Ir. *AIP Conference Proceedings*, 1640, 109. doi:10.1063/1.4905406

Benic, S., & Radovic, B. (2015). Majorana dark matter in a classically scale invariant model. *Journal of High Energy Physics : JHEP*, 2015(1), 143. doi:10.1007/JHEP01(2015)143

Berezhko, E. G., Ksenofontov, L. T., & Völk, H. J. (2015). Re-examination of the Expected gamma-ray emission of supernova remnant SN 1987A. *Astrophysical Journal*, 810(1), 63. doi:10.1088/0004-637X/810/1/63

Bernhardt, D., Brandau, C., Harman, Z., Kozuharov, C., Böhm, S., Bosch, F., ... Müller, A. (2015). Electron-ion collision spectroscopy: Lithium-like xenon ions. *Physical Review A*, 91(1), 012710. doi:10.1103/PhysRevA.91.012710

Bernhardt, D., Brandau, C., Harman, Z., Kozuharov, C., Böhm, S., Bosch, F., ... Müller, A. (2015). Spectroscopy of berylliumlike xenon ions using dielectronic recombination. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 48(14), 144008. doi:10.1088/0953-4075/48/14/144008

Blaettermann, A., Ott, C. R., Kaldun, A., Ding, T., Stooß, V., Laux, M., ... Pfeifer, T. (2015). In situ characterization of few-cycle laser pulses in transient absorption spectroscopy. *Optics Letters*, 40(15), 3464–3467. doi:10.1364/OL.40.003464

Boireau, G., Bouvet, L., Collin, A. P., Coulloux, G., Cribier, M., Deschamp, H., ... Yermia, F. (2016). Online Monitoring of the Osiris Reactor with the Nucifer Neutrino Detector. *Physical Review D*, 93(11), 112006.

doi:10.1103/PhysRevD.93.112006

- Bonnivard, V., Combet, C., Daniel, M., Funk, S., Geringer-Sameth, A., Hinton, J. A., ... Wilkinson, M. I. (2015). Dark matter annihilation and decay in dwarf spheroidal galaxies: the classical and ultrafaint dSphs. *Monthly Notices of the Royal Astronomical Society*, 453(1), 849–867. doi:10.1093/mnras/stv1601
- Bordas Coma, P., Yang, R., Kafexhiu, E., & Aharonian, F. A. (2015). Detection of persistent gamma-ray emission toward SS433/W50. *The Astrophysical Journal Letters*, 807(1), L8. doi:10.1088/2041-8205/807/1/L8
- Breitenfeldt, C., Froese, M. W., Blaum, K., George, S., Grieser, M., Lange, M., ... Wolf, A. (2015). Spreading times of ion-bunches in the Cryogenic Trap forFast ion beams. *International Journal of Mass Spectrometry*, 396, 1–4. doi:10.1016/j.ijms.2015.11.011
- Buck, C., Gramlich, B., & Wagner, S. (2015). Light propagation and fluorescence quantum yields in liquid scintillators. *Journal of Instrumentation*, 10, P09007. doi:10.1088/1748-0221/10/09/P09007
- Buth, C. (2015). High-order harmonic generation with resonant core excitation by ultraintense X-rays. *European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics*, 69(10), 234. doi:10.1140/epjd/e2015-60357-3
- Campos, M., Carcamo Hernandez, A. E., Paes, H., & Schumacher, E. (2015). Higgs $\rightarrow \mu\tau$ as an indication for S_4 flavor symmetry. *Physical Review D*, 91(11), 116011. doi:10.1103/PhysRevD.91.116011
- Camps, P., Misselt, K., Bianchi, S., Lunttila, T., Pinte, C., Natale, G., ... Steinacker, J. (2015). Benchmarking the calculation of stochastic heating and emissivity of dust grains in the context of radiative transfer simulations. *Astronomy and Astrophysics*, 580, A87. doi:10.1051/0004-6361/201525998
- Chakraborty, N., Pavlidou, V., & Fields, B. D. (2015). High Energy Polarization of Blazars: Detection Prospects . *Astrophysical Journal*, 798(1), 16. doi:10.1088/0004-637X/798/1/16
- Chang, X.-C., Liu, R., & Wang, X.-Y. (2015). Star-forming Galaxies as the Origin of the IceCube PeV Neutrinos . *Astrophysical Journal*, 805(2), 95. doi:10.1088/0004-637X/805/2/95
- Chen, X., Sanjari, M. S., Piotrowski, J., Hülsmann, P., Litvinov, Y. A., Nolden, F., ... Stöhlker, T. (2015). Report on a computer-controlled automatic test platform for precision RF cavity characterizations. *Physica Scripta T*, 2015(T166), 014061. doi:10.1088/0031-8949/2015/T166/014061
- Chowdhury, U., Leach, K. G., Andreou, C., Bader, A., Brodeur, M., Chaudhuri, A., ... Dilling, J. (2015). First direct mass measurement of the neutron-deficient nucleus ^{24}Al . *Physical Review C*, 92, 045803. doi:10.1103/PhysRevC.92.045803
- Clark, C. J. R., Dunne, L., Gomez, H. L., Maddox, S., De Vis, P., Smith, M. W. L., ... de Zotti, G. (2015). Herschel-ATLAS: the surprising diversity of dust-selected galaxies in the local submillimetre Universe. *Monthly Notices of the Royal Astronomical Society*, 452(1), 397–430. doi:10.1093/mnras/stv1276
- CMS Collaboration & LHCb Collaboration, Khachatryan, V., Sirunyan, A. M., Tumasyan, A., Adam, W., Bergauer, T., ... Zavertyaev, M. (2015). Observation of the rare $\text{B}_s^0 \rightarrow \mu^+\mu^-$ decay from the combined analysis of CMS and LHCb data. *Nature*, 522(7554), 68–72. doi:10.1038/nature14474
- Cörlin, P., Fischer, A., Schönwald, M., Sperl, A. G., Mizuno, T., Thumm, U., ... Moshammer, R. (2015). Probing calculated O_2^+ potential-energy curves with an XUV-IR pump-probe experiment. *Physical Review A*, 91(4), 043415. doi:10.1103/PhysRevA.91.043415
- Cricchio, D., Fiordilino, E., & Hatsagortsyan, K. Z. (2015). Momentum partition between constituents of exotic atoms during laser-induced tunneling ionization. *Physical Review A*, 92(2), 023408. doi:10.1103/PhysRevA.92.023408
- Crocker, A. F., Chandar, R., Calzetti, D., Holwerda, B. W., Leitherer, C., Popescu , C., & Tuffs, R. J. (2015). Origin of the Diffuse, Far Ultraviolet Emission in the Interarm Regions of M101. *Astrophysical Journal*,

- Dariush, A., Dib, S., Hony, S., Smith, D. J. B., Zhukovska, S., Dunne, L., ... Virdee, J. S. (2015). H-ATLAS/GAMA: the nature and characteristics of optically red galaxies detected at submillimetre wavelengths. *Monthly Notices of the Royal Astronomical Society*, 456(2), 2221–2259. doi:10.1093/mnras/stv2767
- Davies, L. J. M., Robotham, A. S. G., Driver, S. P., Alpaslan, M., Baldry, I. K., Bland-Hawthorn, J., ... Smith, M. W. L. (2015). Galaxy And Mass Assembly (GAMA): the effect of close interactions on star formation in galaxies. *Monthly Notices of the Royal Astronomical Society*, 452(1), 616–636. doi:10.1093/mnras/stv1241
- Della Corte, V., Rotundi, A., Fulle, M., Grün, E., Weissman, P., Sordini, R., ... Altobelli, N. (2015). GIADA: shining a light on the monitoring of the comet dust production from the nucleus of 67P/Churyumov-Gerasimenko. *Astronomy and Astrophysics*, 583, A13. doi:10.1051/0046-361/201526208
- Di Piazza, A. (2015). Analytical tools for investigating strong-field QED processes in tightly focused laser fields. *Physical Review A*, 91(4), 042118. doi:10.1103/PhysRevA.91.042118
- Dorn, A., & Machavariani, Z. S. (2015). The electron-impact double ionization of helium: Dynamical variational treatment. *GESJ: Physics*, 13(1), 26–35.
- Drexlin, G., Lindner, M., & Weinheimer, C. (2015). Wandelbare Geisterteilchen : Für ihre Arbeiten zu Neutrinooszillationen erhalten Takaaki Kajita und Arthur B. McDonald den Physik-Nobelpreis 2015. . *Physik Journal*, 14(12), 24–28. doi:10.1617-9439/15/1212-24
- Dürr, M., & Fileviez Pérez, P. (2015). Theory for baryon number and dark matter at the LHC. *Physical Review D*, 91(9), 095001. doi:10.1103/PhysRevD.91.095001
- Dürr, M., Fileviez Pérez, P., & Smirnov, J. (2015). Simplified Dirac dark matter models and gamma-ray lines. *Physical Review D*, 92(8), 083521. doi:10.1103/PhysRevD.92.083521
- Dürr, M., Fileviez Pérez, P., & Smirnov, J. (2015). Scalar singlet dark matter and gamma lines. *Physics Letters B*, 751, 119–122. doi:10.1016/j.physletb.2015.10.034
- Eger, P., Domainko, W., & Hahn, J. (2015). Exploring the potential X-ray counterpart of the puzzling TeV gamma-ray source HESS J1507-622 with new Suzaku observations. *Monthly Notices of the Royal Astronomical Society*, 447(4), 3564–3575. doi:10.1093/mnras/stu2746
- Eliseev, S., Blaum, K., Block, M., Chenmarev, S., Dorrer, H., Düllmann, C. E., ... Türler, A. (2015). Direct Measurement of the Mass Difference of ^{163}Ho and ^{163}Dy Solves the Q-Value Puzzle for the Neutrino Mass Determination. *Physical Review Letters*, 115(6), 062501. doi:10.1103/PhysRevLett.115.062501
- Epp, S. W., Steinbrügge, R. F., Bernitt, S., Rudolph, J. K., Beilmann, C., Bekker, H., ... Crespo López-Urrutia, J. R. (2015). Single-photon excitation of $\text{K}\alpha$ in heliumlike Kr^{34+} : Results supporting quantum electrodynamics predictions. *Physical Review A*, 92(2), 020502(R). doi:10.1103/PhysRevA.92.020502
- Erhard, R., & Bauke, H. (2015). Spin effects in Kapitza-Dirac scattering at light with elliptical polarization. *Physical Review A*, 92(4), 042123. doi:10.1103/PhysRevA.92.042123
- Esmaili, A., & Smirnov, A. (2015). Discrete symmetries and mixing of Dirac neutrinos. *Physical Review D*, 92(9), 093012. doi:10.1103/PhysRevD.92.093012
- Fechner, L., Camus, N., Krupp, A., Ullrich, J., Pfeifer, T., & Moshammer, R. (2015). Creation and survival of autoionizing states in strong laser fields. *Physical Review A*, 92(5), 051403. doi:10.1103/PhysRevA.92.051403
- Feranchuk, I. D., Leonov, A. V., & Skoromnik, O. (2015). Physical background for parameters of the quantum Rabi model. *Journal of Physics A: Mathematical and Theoretical*, 49, 454001. doi:10.1088/1751-8113/49/45/454001
- Fileviez Pérez, P. (2015). New paradigm for baryon and lepton number violation. *Physics Reports: Review Section of Physics Letters*, 597, 1–30. doi:10.1016/j.physrep.2015.09.001

- Fink, D. A., Cocolios, T. E., Andreyev, A. N., Antalic, S., Barzakh, A. E., Bastin, B., ... Wendt, K. D. A. (2015). In-Source Laser Spectroscopy with the Laser Ion Source and Trap: First Direct Study of the Ground-State Properties of $^{217,219}\text{Po}$. *Physical Review X*, 5(1), 011018. doi:10.1103/PhysRevX.5.011018
- Frömmgen, N., Balabanski, D. L., Bissell, M. L., Bierón, J., Blaum, K., Cheal, B., ... Yordanov, D. T. (2015). Collinear laser spectroscopy of atomic cadmium. *European Physical Journal D: Atomic, Molecular, Optical and Plasma Physics*, 69(6), 164, 1–12. doi:10.1140/epjd/e2015-60219-0
- Fulle, M., Della Corte, V., Rotundi, A., Weissman, P., Juhasz, A., Szego, K., ... Altobelli, N. (2015). Density and Charge of Pristine Fluffy Particles from Comet 67P/Churyumov-Gerasimenko. *Astrophysical Journal, Letters*, 802(1), L12. doi:10.1088/2041-8205/802/1/L12
- Gadola, A., Bauer, C., Eisenkolb, F., Florin , D., Foehr, C., Garrecht, F., ... Zietara, K. (2015). FlashCam: a novel Cherenkov telescope camera with continuous signal digitization. *Journal of Instrumentation*, 10, C01014. doi:10.1088/1748-0221/10/01/C01014
- Gao , B. S., Najafi, M. A., Atanasov, D., Blaum, K., Bosch, F., Brandau, C., ... Zhou, X. H. (2015). Experiments with Stored Highly Charged Ions at the Border between Atomic and Nuclear Physics. *Physics Procedia*, 66, 28–38. doi:10.1016/j.phpro.2015.05.006
- Gao, B. S., Najafi, M. A., Atanasov, D., Blaum, K., Bosch, F., Brandau, C., ... Zhou, X. H. (2015). Radioactive decays of highly-charged ions. *EPJ Web of Conferences*, 93, 05003. doi:10.1051/epjconf/20159305003
- Garcia Ruiz, R. F., Bissell, M. L., Blaum, K., Frömmgen, N., Hammen, M., Holt, J. D., ... Yordanov, D. T. (2015). Ground-state electromagnetic moments of calcium isotopes. *Physical Review C*, 91(4), 041304(R). doi:10.1103/PhysRevC.91.041304
- Gärttner, M. (2015). Heralded W-state preparation using laser-designed superatoms. *Physical Review A*, 92(1), 013629. doi:10.1103/PhysRevA.92.013629
- Ge, S.-F. (2015). The Georgi algorithms of jet clustering. *Journal of High Energy Physics : JHEP*, 2015(5), 066. doi:10.1007/JHEP05(2015)066
- Ge, S.-F., Lindner, M., & Patra, S. (2015). New physics effects on neutrinoless double beta decay from right-handed current. *Journal of High Energy Physics : JHEP*, 2015(10), 077. doi:10.1007/JHEP10(2015)077
- Ge, S.-F., & Rodejohann, W. (2015). JUNO and neutrinoless double beta decay. *Physical Review D*, 92(9), 093006. doi:10.1103/PhysRevD.92.093006
- Giacinti, G., Kachelriess, M., Kalashev, O., Neronov, A., & Semikoz, D. V. (2015). Unified model for cosmic rays above 10^{17} eV and the diffuse gamma-ray and neutrino backgrounds. *Physical Review D*, 92(8), 083016. doi:10.1103/PhysRevD.92.083016
- Gorges, C., Blaum, K., Frömmgen, N., Geppert, C., Hammen, M., Kaufmann, S., ... Nörterhäuser, W. (2015). Isotope shift of $^{40,42,44,48}\text{Ca}$ in the $4\text{s}^2\text{S}_{1/2} \rightarrow 4\text{p}^2\text{P}_{3/2}$ transition. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 48(24), 245008. doi:10.1088/0953-4075/48/24/245008
- Hahn, M., Becker, A., Bernhardt, D., Grieser, M., Krantz, C., Lestinsky, M., ... Savin, D. W. (2015). Storage ring cross section measurements for electron impact ionization of Fe^{7+} . *The Astrophysical Journal*, 813(1), 16. doi:10.1088/0004-637X/813/1/16
- He, H.-J., Rodejohann, W., & Xu, X. (2015). Origin of constrained maximal CP violation in flavor symmetry. *Physics Letters B*, 751, 586–594. doi:10.1016/j.physletb.2015.10.066
- Heeck, J., Holthausen , M., Rodejohann, W., & Shimizu, Y. (2015). Higgs $\rightarrow \mu\tau$ in Abelian and non-Abelian flavor symmetry models. *Nuclear Physics B*, 896, 281–310. doi:10.1016/j.nuclphysb.2015.04.025
- Heeck, J., & Patra, S. (2015). Minimal Left-Right Symmetric Dark Matter. *Physical Review Letters*, 115(12), 121804. doi:10.1103/PhysRevLett.115.121804

- Heeg, K. P., Ott, C. R., Schumacher, D., Wille, H.-C., Röhlsberger, R., Pfeifer, T., & Evers, J. (2015). Interferometric phase detection at x-ray energies via Fano resonance control. *Physical Review Letters*, 114(20), 207401. doi:10.1103/PhysRevLett.114.207401
- Heeg, K. P., Haber, J., Schumacher, D., Bocklage, L., Wille, H.-C., Schulze, K. S., ... Evers, J. (2015). Tunable Subluminal Propagation of Narrow-band X-Ray Pulses. *Physical Review Letters*, 114(20), 203601. doi:10.1103/PhysRevLett.114.203601
- Heeg, K. P., & Evers, J. (2015). Collective effects between multiple nuclear ensembles in an x-ray cavity-QED setup. *Physical Review A*, 91(6), 063803. doi:10.1103/PhysRevA.91.063803
- Heusser, G., Weber, M., Hakenmüller, J., Laubenstein, M., Lindner, M., Maneschg, W., ... Strecker , H. (2015). GIOVE: a new detector setup for high sensitivity germanium spectroscopy at shallow depth. *European Physical Journal C*, 75(11), 531. doi:10.1140/epjc/s10052-015-3704-2
- Heylen, H., Babcock, C., Billowes, J., Bissell, M. L., Blaum, K., Campbell, P., ... Yordanov, D. T. (2015). Colinear Laser Spectroscopy on Neutron-rich Mn Isotopes Approaching N = 40. *Acta Physica Polonica B*, 46(3), 699–702. doi:10.5506/APhysPolB.46.699
- Heylen, H., Babcock, C., Billowes, J., Bissell, M. L., Blaum, K., Campbell, P., ... Yordanov, D. T. (2015). Spins and magnetic moments of $^{58,60,62,64}\text{Mn}$ ground states and isomers. *Physical Review C*, 92(4), 044311. doi:10.1103/PhysRevC.92.044311
- Horanyi, M., Szalay, J. R., Kempf, S., Schmidt, J., Grün, E., Srama, R., & Sternovsky, Z. (2015). A permanent, asymmetric dust cloud around the Moon. *Nature*, 522(7556), 324–326. doi:10.1038/nature14479
- Hu, Y., Liu, W., Yong, S., Xi, S., Jun, J., Yaping, Y., ... Hong, C. (2015). Electromagnetically-induced-transparency-like phenomenon with resonant meta-atoms in a cavity. *Physical Review A*, 92(5), 053824. doi:10.1103/PhysRevA.92.053824
- Hubele, R., Schuricke, M., Gouillon, J., Lindenblatt, H., Ferreira , N., Laforge, A., ... Fischer, D. (2015). Electron and recoil ion momentum imaging with a magneto-optically trapped target. *Review of Scientific Instruments*, 86(3), 033105. doi:10.1063/1.4914040
- Humbert, P., Lindner, M., & Smirnov, J. (2015). The inverse seesaw in conformal electro-weak symmetry breaking and phenomenological consequences. *Journal of High Energy Physics : JHEP*, 2015(6), 035. doi:10.1007/JHEP06(2015)035
- Humbert, P., Lindner, M., Patra, S., & Smirnov, J. (2015). Lepton number violation within the conformal inverse seesaw. *Journal of High Energy Physics : JHEP*, 2015(9), 064. doi:10.1007/JHEP09(2015)064
- Humbert, P., Lindner, M., & Smirnov, J. (2015). The Inverse Seesaw in Conformal Electro-Weak Symmery Breaking and Phenomenological Consequences. *Journal of High Energy Physics : JHEP*, 2015(7), 035. doi:10.1007/JHEP06(2015)035
- Illg, C., Haag, M., Teeny, N., Wirth, J., & Fähnle, M. (2016). Physical and mathematical justification of the numerical Brillouin zone integration of the Boltzmann rate equation by Gaussian smearing. *Journal of Theoretical and Applied Physics*, 10(1), 1–6. doi:10.1007/s40094-015-0193-5
- Inoue , Y., Tanaka , Y. T., Odaka, H., Takada, A., Ichinohe, Y., Saito, S., ... Takahashi, T. (2015). Prospect for future MeV gamma-ray active galactic nuclei population studies. *Publications of the Astronomical Society of Japan*, 67(4), 76. doi:10.1093/pasj/psv043
- Ioannisian, A. N., Smirnov, A. Y., & Wyler, D. (2015). Oscillations of the ^7Be solar neutrinos inside the Earth. *Physical Review D*, 92(1), 013014. doi:10.1103/PhysRevD.92.013014
- Jones, C. F., Bernando, C., Tanyag, R. M. P., Bacellar, C., Ferguson, K. R., Gomez, L. F., ... Vilesov, A. F. (2016). Coupled motion of Xe clusters and quantum vortices in He nanodroplets. *Physical Review B*, 93(18), 180510(R). doi:10.1103/PhysRevB.93.180510

Jordan, E., Cerchiari, G., Fritzsche , S., & Kellerbauer, A. (2015). High-Resolution Spectroscopy on the Laser-Cooling Candidate La⁻. *Physical Review Letters*, 115(11), 113001. doi:10.1103/PhysRevLett.115.113001

Jörg, H., Hu, Z., Bekker, H., Blessenohl, M., Hollain, D., Fritzsche, S., ... Tashenov, S. (2015). Linear polarization of x-ray transitions due to dielectronic recombination in highly charged ions. *Physical Review A*, 91(4), 042705. doi:10.1103/PhysRevA.91.042705

K. V. , Rajitha., Dey, T. N., Evers, J., & Kiffner, M. (2015). Pulse splitting in light propagation through N-type atomic media due to an interplay of Kerr nonlinearity and group-velocity dispersion. *Physical Review A*, 92(2), 023840. doi:10.1103/PhysRevA.92.023840

Kafle, B., Aviv, O., Chandrasekaran, V., Heber, O., Rappaport, M. L., Rubinstein, H., ... Zajfman, D. (2015). Electron detachment and fragmentation of laser-excited rotationally hot Al₄⁻. *Physical Review A*, 92(5), 052503. doi:10.1103/PhysRevA.92.052503

Karlovs, D. (2015). Gaussian and Airy wave packets of massive particles with orbital angular momentum. *Physical Review A: Atomic, Molecular, and Optical Physics*, 91(1), 013847. doi:10.1103/PhysRevA.91.013847

Kaufmann, S., Beyer, T., Blaum, K., Block, M., Düllmann, C. E., Eberhardt, K., ... Wendt, K. (2015). TRIGA-SPEC: the prototype of MATS and LaSpec. *Journal of Physics: Conference Series*, 599(conference 1), 012033. doi:10.1088/1742-6596/599/1/012033

Kawano, T., Talou, P., & Weidenmüller, H. A. (2015). Random-matrix approach to the statistical compound nuclear reaction at low energies using the Monte Carlo technique. *Physical Review C*, 92(4), 044617. doi:10.1103/PhysRevC.92.044617

Kellerbauer, A., Cerchiari, G., Jordan, E., & Walter, C. W. (2015). High-resolution laser spectroscopy on bound-bound transitions in La⁻. *Physica Scripta*, 90(5), 054014. doi:10.1088/0031-8949/90/5/054014

Kelner, S. R., Prosekin, A., & Aharonian, F. A. (2015). Synchro-curvature radiation of charged particles in the strong curved magnetic fields. *The Astronomical Journal*, 149(1), 33. doi:10.1088/0004-6256/149/1/33

Kennedy, R., Bamford, S. P., Baldry, I., Haeussler, B., Holwerda, B. W., Hopkins, A. M., ... Vulcani, B. (2015). Galaxy And Mass Assembly (GAMA): the wavelength dependence of galaxy structure versus redshift and luminosity. *Monthly Notices of the Royal Astronomical Society*, 454(1), 806–817. doi:10.1093/mnras/stv2032

Khalisi , E., Srama, R., & Gruen, E. (2015). Counter data of the Cosmic Dust Analyzer aboard the Cassini spacecraft and possible “dust clouds” at Saturn. *Advances in Space Research*, 55(1), 303–310. doi:10.1016/j.asr.2014.09.002

Kierspel, T., Wiese, J., Mullins, T., Robinson, J., Aquila, A., Barty, A., ... Kuepper, J. (2015). Strongly aligned gas-phase molecules at free-electron lasers. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 48(20), 204002. doi:10.1088/0953-4075/48/20/204002

Kirsten, T. (2015). Radiochemical Solar Neutrino Experiments: Door Opener for Modern Astroparticle Physics. *Il Nuovo Saggiatore*, 31, 46–58. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-0029-22D9-9>

Klaiber, M., & Dimitrovski, D. (2015). Survival of Rydberg atoms in intense laser fields and the role of non-dipole effects. *Physical Review A: Atomic, Molecular, and Optical Physics*, 91(2), 023401. doi:10.1103/PhysRevA.91.023401

Klaiber, M., Hatsagortsyan, K. Z., & Keitel, C. H. (2015). Tunneling Dynamics in Multiphoton Ionization and Attoclock Calibration. *Physical Review Letters*, 114(8), 083001. doi:10.1103/PhysRevLett.114.083001

Klaiber, M., & Dimitrovski, D. (2015). Survival of Rydberg atoms in intense laser fields and the role of non-dipole effects. *Physical Review A: Atomic, Molecular, and Optical Physics*, 91(2), 023401. doi:10.1103/PhysRevA.91.023401

Köhler, F., Sturm, S., Kracke, A., Werth, G., Quint, W., & Blaum, K. (2015). The electron mass from g-factor

measurements on hydrogen-like carbon $^{12}\text{C}^{5+}$. *Journal of Physics B*, 48(14), 144032. doi:10.1088/0953-4075/48/14/144032

Kovalenko, O., Dolinskii, O., Litvinov, Y. A., Maier, R., Prasuhn, D., & Stöhlker, T. (2015). Investigation of the heavy-ion mode in the FAIR High Energy Storage Ring. *Physica Scripta T*, 2015(T166), 014042. doi:10.1088/0031-8949/2015/T166/014042

Kusoglu, A., Stuchbery, A. E., Georgiev, G., Brown, B. A., Goasdouf, A., Atanasova, L., ... Yordanov, D. T. (2015). Magnetism of an Excited Self-Conjugate Nucleus: Precise Measurement of the g Factor of the 2_1^+ State in ^{24}Mg . *Physical Review Letters*, 114(6), 062501, -. doi:10.1103/PhysRevLett.114.062501

Kwiatkowski, A. A., Andreoiu, C., Bale, J. C., Chaudhuri, A., Chowdhury, U., Malbrunot-Ettenauer, S., ... Dilling, J. (2015). Observation of a crossover of S_{2n} in the island of inversion from precision mass spectrometry. *Physical Review C*, 92(6), 061301(R). doi:10.1103/PhysRevC.92.061301

Leach, K. G., Grossheim, A., Lennarz, A., Brunner, T., Crespo López-Urrutia, J. R., Gallant, A. T., ... Frekers, D. (2015). The TITAN in-trap decay spectroscopy facility at TRIUMF. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 780, 91–99. doi:10.1016/j.nima.2014.12.118

Lev, U., Graham, L., Madsen, C. B., Ben-Itzhak, I., Bruner, B. D., Esry, B. D., ... Zajfman, D. (2015). Quantum control of photodissociation using intense, femtosecond pulses shaped with third order dispersion. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 48(20), 201001. doi:10.1088/0953-4075/48/20/201001

LHCb collaboration, Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... Zucchelli, S. (2015). Measurement of forward J/ψ production cross-sections in pp collisions at $\sqrt{s}=13$ TeV. *Journal of High Energy Physics : JHEP*, 2015(10), 172. doi:10.1007/JHEP10(2015)172

Li, J.-X., Hatsagortsyan, K. Z., Galow, B. J., & Keitel, C. H. (2015). Attosecond Gamma-Ray Pulses via Non-linear Compton Scattering in the Radiation-Dominated Regime. *Physical Review Letters*, 115(20), 204801. doi:10.1103/PhysRevLett.115.204801

Li, J.-X., Galow, B. J., Keitel, C. H., & Harman, Z. (2015). Ion Acceleration by Short Chirped Laser Pulses. *Applied Sciences*, 5(1), 36–47. doi:10.3390/app5010036

Li, Y., Srama, R., Wu, Y., & Grün, E. (2015). Modeling the detection of impact ejecta on the lunar surface. *Planetary and Space Science*, 119, 185–193. doi:10.1016/j.pss.2015.09.019

Liao, W.-T., & Ahrens, S. (2015). Gravitational and relativistic deflection of X-ray superradiance. *Nature Photonics*, 9, 169–173. doi:10.1038/nphoton.2015.7

Liekhus-Schmaltz, C. E., Tenney, I., Osipov, T., Sanchez-Gonzalez, A., Berrah, N., Boll, R., ... Petrovic, V. S. (2015). Ultrafast isomerization initiated by X-ray core ionization. *Nature Communications*, 6, 8199. doi:10.1038/ncomms9199

Liske, J., Baldry, I. K., Driver, P., Tuffs, R. J., Alpaslan, M., Simmat, E., ... Wright, A. H. (2015). Galaxy And Mass Assembly (GAMA): end of survey report and data release 2. *Monthly Notices of the Royal Astronomical Society*, 452(2), 2087–2126. doi:10.1093/mnras/stv1436

Liu, Z., Cavaletto, S., Ott, C. R., Meyer, K., Mi, Y., Harman, Z., ... Pfeifer, T. (2015). Phase reconstruction of strong-field excited systems by transient-absorption spectroscopy. *Physical Review Letters*, 115(3), 033003. doi:10.1103/PhysRevLett.115.033003

Long, A. J., Patel, H., & Trodden, M. (2015). Electroweak vacuum angle at finite temperature and implications for baryogenesis. *Physical Review D*, 92(4), 043513. doi:10.1103/PhysRevD.92.043513

Ludhova, L., Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., ... Zuzel, G. (2015). Geo-neutrinos and Borexino. *Physics of Particles and Nuclei*, 46(2), 174–181. doi:10.1134/S1063779615020148

Ludl, P., & Smirnov, A. Y. (2015). Lepton mixing from the hidden sector. *Physical Review D*, 92(7), 073010. doi:10.1103/PhysRevD.92.073010

Macovei, M., Mishra, M., & Keitel, C. H. (2015). Population inversion in two-level systems possessing permanent dipoles. *Physical Review A*, 92(1), 013846. doi:10.1103/PhysRevA.92.013846

Malbrunot-Ettenauer, S., Brunner, T., Chowdhury, U., Gallant, A. T., Simon, V. V., Brodeur, M., ... Dilling, J. (2015). Penning trap mass measurements utilizing highly charged ions as a path to benchmark isospin-symmetry breaking corrections in ^{74}Rb . *Physical Review C*, 91(4), 045504. doi:10.1103/PhysRevC.91.045504

Marrodán Undagoitia, T., & Rauch, L. (2015). Dark matter direct-detection experiments. *Journal of Physics G: Nuclear and Particle Physics*, 43(1), 013001. doi:10.1088/0954-3899/43/1/013001

Mei, B., Aumann, T., Bishop, S., Blaum, K., Boretzky, K., Bosch, F., ... Zhong, Q. (2015). First measurement of the $^{96}\text{Ru}(\text{p},\gamma)^{97}\text{Rh}$ cross section for the p process with a storage ring. *Physical Review C*, 92(3), 035803. doi:10.1103/PhysRevC.92.035803

Meisel, Z., George, S., Ahn, S., Bazin, D., Brown, B. A., Browne, J., ... Zegers, R. G. T. (2015). Mass Measurement of ^{56}Sc Reveals a Small $A = 56$ Odd-Even Mass Staggering, Implying a Cooler Accreted Neutron Star Crust. *Physical Review Letters*, 115(16), 162501. doi:10.1103/PhysRevLett.115.162501

Meisel, Z., George, S., Ahn, S., Browne, J., Bazin, D., Brown, B. A., ... Zegers, R. G. T. (2015). Mass Measurements Demonstrate a Strong $N = 28$ Shell Gap in Argon. *Physical Review Letters*, 114(2), 022501. doi:10.1103/PhysRevLett.114.022501

Meuren, S., Hatsagortsyan, K. Z., Keitel, C. H., & Di Piazza, A. (2015). Polarization-operator approach to pair creation in short laser pulses. *Physical Review D*, 91(1), 013009, -. doi:10.1103/PhysRevD.91.013009

Meuren, S., Hatsagortsyan, K. Z., Keitel, C. H., & Di Piazza, A. (2015). High-Energy Recollision Processes of Laser-Generated Electron-Positron Pairs. *Physical Review Letters*, 114(14), 143201. doi:10.1103/PhysRevLett.114.143201

Meuren, S., Keitel, C. H., & Di Piazza, A. (2015). Nonlinear neutrino-photon interactions inside strong laser pulses. *Journal of High Energy Physics*, 2015(6), 127. doi:10.1007/JHEP06(2015)127

Mezei, J. Z., Niyonzima, S., Backodissa, D., Pop, N., Waffeutamo, F. O., Chakrabarti, K., ... Schneid, I. F. (2015). Electronic and photonic reactive collisions in edge fusion plasma and interstellar space: Application to H_2 and BeH systems. *Journal of Physics Conference Series*, 576(conf 1), 012005. doi:10.1088/1742-6596/576/1/012005

Michel, N., Zatorski, J., & Keitel, C. H. (2015). Influence of ion movement in a particle trap on the bound electron g factor. *Physical Review A*, 92(5), 052509. doi:10.1103/PhysRevA.92.052509

Minaya, E. (2015). An Investigation of the Accuracy of the PI-ICR Technique at SHIPTRAP by a measurement of the mass difference between ^{132}Xe and ^{131}Xe . *JPS Conference Proceedings*, 6, 020023. doi:10.7566/JPSCP.6.020023

Mironova, I. A., Aplin, K. L., Arnold, F., Bazilevskaya, G. A., Harrison, R. G., Krivolutsky, A. A., ... Usoskin, I. G. (2015). Energetic Particle Influence on the Earth's Atmosphere. *Space Science Reviews*, 194(1-4), 1–96. doi:10.1007/s11214-015-0185-4

Mucke, M., Zhaunerchyk, V., Frasinski, L. J., Squibb, R. J., Siano, M., Eland, J. H. D., ... Feifel, R. (2015). Covariance mapping of two-photon double core hole states in C_2H_2 and C_2H_6 produced by an x-ray free electron laser. *New Journal of Physics*, 17, 073002. doi:10.1088/1367-2630/17/7/073002

Natale, G., Popescu, C. C., Tuffs, R. J., Debattista, V. P., Fischer, J., & Grootes, M. (2015). Predicting the stellar and non-equilibrium dust emission spectra of high-resolution simulated galaxies with DART-RAY. *Monthly Notices of the Royal Astronomical Society*, 449(1), 243–267. doi:10.1093/mnras/stv286

Nörtershäuser, W., Geppert, C., Krieger, A., Pachucki, K., Puchalski, M., Blaum, K., ... Yordanov, D. T. (2015). Precision Test of Many-Body QED in the Be⁺ 2p Fine Structure Doublet Using Short-Lived Isotopes. *Physical Review Letters*, 115(3), 033002. doi:10.1103/PhysRevLett.115.033002

Novotny, O., Allgeier, S., Enss, C., Fleischmann, A., Gamer, L., Hengstler, D., ... Wolf, A. (2015). Cryogenic micro-calorimeters for mass spectrometric identification of neutral molecules and molecular fragments. *Journal of Applied Physics*, 118(10), 104503. doi:10.1063/1.4930036

Novotny, C., Becker, A., Buhr h, H., Domesle, C., Geppert, W., Grieser, M., ... Savin , D. W. (2015). Erratum: Dissociative Recombination Measurements of HCl⁺ Using an Ion Storage Ring" (2013, ApJ, 777, 54) . *Astrophysical Journal*, 810(2), 169. doi:10.1088/0004-637X/810/2/169

O'Connor, A., Grussie, F., Bruhns, H., de Ruette, N., Koenning, T. P., Miller, K. A., ... Kreckel, H. (2015). Generation of neutral atomic beams utilizing photodetachment by high power diode laser stacks. *Review of Scientific Instruments*, 86, 113306. doi:10.1063/1.4934873

Ohm, S., Zabalza, V., Hinton, J. A., & Parkin, E. R. (2015). On the origin of gamma-ray emission in eta Carina. *Monthly Notices of the Royal Astronomical Society*, 449(1), L132–L136. doi:10.1093/mnrasl/slv032

Ohmer, S., & Patel, H. (2015). Leptobaryons as Majorana dark matter. *Physical Review D*, 92(5), 055020. doi:10.1103/PhysRevD.92.055020

Paes, H., & Rodejohann, W. (2015). Neutrinoless double beta decay. *New Journal of Physics*, 17, 115010. doi:10.1088/1367-2630/17/11/115010

Pálffy, A. (2015). X-Ray physics: Straight outta Compton. *Nature Physics*, 11, 893–894. doi:10.1038/nphys3525

Pálffy, A., Buss, O., Hoefer, A., & Weidenmüller, H. A. (2015). Laser-nucleus interactions: The quasi-adiabatic regime. *Physical Review C*, 92(4), 044619. doi:10.1103/PhysRevC.92.044619

Papenbrock, T., & Weidenmüller, H. A. (2015). Effective field theory of emergent symmetry breaking in deformed atomic nuclei. *Journal of Physics G: Nuclear and Particle Physics*, 42(10), 105103. doi:10.1088/0954-3899/42/10/105103

Patel, H. (2015). Package-X: A Mathematica package for the analytic calculation of one-loop integrals. *Computer Physics Communications*, 197, 276–290. doi:10.1016/j.cpc.2015.08.017

Patra, S., Sahoo, N., & Sahu, N. (2015). Dipolar dark matter in light of the 3.5 keV x-ray line, neutrino mass, and LUX data. *Physical Review D*, 91(11), 115013. doi:10.1103/PhysRevD.91.115013

Pflüger, T., Ren, X., & Dorn, A. (2015). Electron-impact-induced dissociation of small argon clusters. *Physical Review A*, 91(5), 052701. doi:10.1103/PhysRevA.91.052701

Pirjola, L., Karl, M., Ronkko, T., & Arnold, F. (2015). Model studies of volatile diesel exhaust particle formation: are organic vapours involved in nucleation and growth? *Atmospheric Chemistry and Physics*, 15(18), 10435–10452. doi:10.5194/acp-15-10435-2015

Pistillo, C., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A., ... Zmeskal, J. (2015). Emulsion detectors for the antihydrogen detection in AEgIS. *Hyperfine Interactions*, 233(1-3), 29–34. doi:10.1007/s10751-015-1175-3

Pluhar, Z., & Weidenmüller, H. A. (2015). Quantum graphs and random-matrix theory. *Journal of Physics A: Mathematical and General*, 48(27), 275102. doi:10.1088/1751-8113/48/27/275102

Povinec, P. P., Pham, M. K., Busto, J., Cerna, C., Degering, D., Hamajima, Y., ... Stekl, I. (2015). Reference material for natural radionuclides in glass designed for underground experiments. *Journal of Radioanalytical and Nuclear Chemistry*, 307(1), 619–626. doi:10.1007/s10967-015-4202-6

Prosekin, A., Kelner, S. R., & Aharonian, F. A. (2015). On transition of propagation of relativistic par-

- ticles from the ballistic to the diffusion regime. *Physical Review D*, 92(8), 083003. doi:10.1103/PhysRevD.92.083003
- Pullen, M. G., Wolter, B., Le, A.-T., Baudisch, M., Hemmer, M., Senftleben, A., ... Biegert, J. (2015). Imaging an aligned polyatomic molecule with laser-induced electron diffraction. *Nature Communications*, 6, 7262. doi:10.1038/ncomms8262
- Raghavan, M., Steinrücken, M., Harris, K., Schiffels, S., Rasmussen, S., DeGiorgio, M., ... Willerslev, E. (2015). Genomic evidence for the Pleistocene and recent population history of Native Americans. *Science*, 349(6250), aab3884. doi:10.1126/science.aab3884
- Razzaque, S., & Smirnov, J. (2015). Super-PINGU for measurement of the leptonic CP-phase with atmospheric neutrinos. *Journal of High Energy Physics : JHEP*, 2015(5), 139. doi:10.1007/JHEP05(2015)139
- Reichegger, A. J., & Evers, J. (2015). Temporal dynamics of stimulated emission with applications in nuclear quantum optics. *Physical Review A*, 91(5), 053810. doi:10.1103/PhysRevA.91.053810
- Ren, X., Amami, S., Zatsarinny, O., Pflüger, T., Weyland, M., Baek, W. Y., ... Dorn, A. (2015). Kinematically complete study of low-energy electron-impact ionization of neon: Internormalized cross sections in three-dimensional kinematics. *Physical Review A*, 91(3), 032707. doi:10.1103/PhysRevA.91.032707
- Ren, X., Pflüger, T., Weyland, M., Baek, W. Y., Rabus, H., Ullrich, J., & Dorn, A. (2015). High-resolution (e, 2e + ion) study of electron-impact ionization and fragmentation of methane. *The Journal of Chemical Physics*, 142(17), 174313. doi:10.1063/1.4919691
- Ren, X., Senftleben, A., Pflüger, T., Bartschat , K., Zatsarinny, O., Berakdar, J., ... Dorn, A. (2015). Propensity for distinguishing two free electrons with equal energies in electron-impact ionization of helium. *Physical Review A*, 92(5), 052707. doi:10.1103/PhysRevA.92.052707
- Rodejohann, W., & Xu, X.-J. (2015). Origin of Symmetric PMNS and CKM Matrices. *Physical Review D*, 91(5), 056004, -. doi:10.1103/PhysRevD.91.056004
- Rodejohann, W., & Xu, X. (2015). Robustness of neutrino mass matrix predictions. *Nuclear Physics (Amsterdam) B*, 899, 463–475. doi:10.1016/j.nuclphysb.2015.08.014
- Rodejohann, W., & Yaguna, C. E. (2015). Scalar dark matter in the B - L model. *Journal of Cosmology and Astroparticle Physics*, 2015(12), 032. doi:10.1088/1475-7516/2015/12/032
- Rosenbusch, M., Ascher, P., Atanasov, D., Barbieri, C., Beck, D., Blaum, K., ... Zuber, K. (2015). Probing the N = 32 Shell Closure below the Magic Proton Number Z = 20: Mass Measurements of the Exotic Isotopes $^{52,53}\text{K}$. *Physical Review Letters*, 114(20), 202501. doi:10.1103/PhysRevLett.114.202501
- Rosenbusch, M., Chauveau, P., Delahaye, P., Marx, G., Schweikhard, L., Wienholtz, F., & Wolf, R. (2015). Delayed Bunching for Multi-Reflection Time-of-Flight Mass Separation. *AIP Conference Proceedings*, 1668, 050001. doi:10.1063/1.4923120
- Rotundi, A., Sierks, H., Della Corte, V., Fulle, M., Gutierrez, P. J., Lara, L., ... Zarnecki, J. C. (2015). Dust measurements in the coma of comet 67P/Churyumov-Gerasimenko inbound to the Sun. *Science*, 347(6220), aaa3905. doi:10.1126/science.aaa3905
- Rudenko , A., & Rolles, D. (2015). Time-resolved studies with FELs. *Journal of Electron Spectroscopy and Related Phenomena*, 204, 228–236. doi:10.1016/j.elspec.2015.07.010
- Salamin, Y. I., Li, J.-X., Galow, B. J., & Keitel, C. H. (2015). Feasibility of electron cyclotron autoresonance acceleration by a short terahertz pulse . *Optics Express*, 23(13), 17560–17567. doi:10.1364/OE.23.017560
- Sarri, G., Dieckmann, M. E., Kourakis, I., Di Piazza, A., Reville, B., Keitel, C. H., & Zepf, M. (2015). Overview of laser-driven generation of electron-positron beams. *Journal of Plasma Physics*, 81(04), 455810401. doi:10.1017/S002237781500046X

Sarri, G., Poder, K., Cole, J. M., Schumaker, W., Di Piazza, A., Reville, B., ... Zepf, M. (2015). Generation of neutral and high-density electron–positron pair plasmas in the laboratory. *Nature Communications*, 6, 6747. doi:10.1038/ncomms7747

Schmöger, L., Versolato, O., Schwarz, M., Kohnen, M., Windberger, A., Piest, B., ... Crespo López-Urrutia, J. R. (2015). Coulomb crystallization of highly charged ions. *Science*, 347(6227), 1233–1236. doi:10.1126/science.aaa2960

Schmöger, L., Schwarz, M., Baumann, T. M., Versolato, O., Piest, B., Pfeifer, T., ... Crespo López-Urrutia, J. R. (2015). Deceleration, precooling, and multi-pass stopping of highly charged ions in Be⁺ Coulomb crystals. *Review of Scientific Instruments*, 86(10), 103111. doi:10.1063/1.4934245

Schneider, F., Beyer, T., Blaum, K., Block, M., Chenmarev, S., Dorrer, H., ... Wendt, K. (2015). Preparatory studies for a high-precision Penning-trap measurement of the ¹⁶³Ho electron capture Q-value. *European Physical Journal A*, 51(7), 89. doi:10.1140/epja/i2015-15089-8

Schnorr, K., Senftleben, A., Schmid, G., Augustin, S., Kurka , M., Rudenko, A., ... Moshammer, R. (2015). Time-resolved study of ICD in Ne dimers using FEL radiation. *Journal of Electron Spectroscopy and Related Phenomena*, 204, 245–256. doi:10.1016/j.elspec.2015.07.009

Shah, C., Jörg, H., Bernitt, S., Dobrodey, S., Steinbrügge, R. F., Beilmann, C., ... Tashenov, S. (2015). Polarization measurement of dielectronic recombination transitions in highly charged krypton ions. *Physical Review A*, 92(4), 042702. doi:10.1103/PhysRevA.92.042702

Shimizu, Y., Tanimoto, M., & Yamamoto, K. (2015). Predicting CP violation in deviation from tri-bimaximal mixing of neutrinos. *Modern Physics Letters A*, 30(1), 1550002. doi:10.1142/S0217732315500029

Singh, P., Purohit, G., Dorn, A., Ren, X., & Patidar, V. (2015). Calculation of fully differential cross sections for the near threshold double ionization of helium atoms. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 49(2), 025201. doi:10.1088/0953-4075/49/2/025201

Skoromnik, O., Feranchuk, I. D., Lu, D. V., & Keitel, C. H. (2015). Regularization of ultraviolet divergence for a particle interacting with a scalar quantum field. *Physical Review D*, 92(12), 125019. doi:10.1103/PhysRevD.92.125019

Smirnov, O., Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., ... Zuzel, G. (2015). Solar neutrino with Borexino: Results and perspectives. *Physics of Particles and Nuclei*, 46(2), 166–173. doi:10.1134/S1063779615020185

Smorra, C., Mooser, A., Franke, K., Nagahama, H., Schneider, G., Higuchi, T., ... Ulmer, S. (2015). A reservoir trap for antiprotons. *International Journal of Mass Spectrometry*, 389, 10–13. doi:10.1016/j.ijms.2015.08.007

Smorra, C., Blaum, K., Bojtar, L., Borchert, M., Franke, K., Higuchi, T., ... Ulmer, S. (2015). BASE – the baryon antibaryon symmetry experiment. *European Physical Journal - Special Topics*, 224(16), 3055–3108. doi:10.1140/epjst/e2015-02607-4

Soja, R. H., Sommer, M., Herzog, J., Agarwal, J., Rodmann, J., Srama, R., ... Grün, E. (2015). Characteristics of the dust trail of 67P/Churyumov-Gerasimenko: an application of the IMEX model. *Astronomy and Astrophysics*, 583, A18. doi:10.1051/0004-6361/201526184

Spiewanowski, M. D., Gulyas, L., Horbatsch, M., Gouillon, J., Ferreira, N., Hubele, R., ... Kirchner, T. (2015). Target electron ionization in Li²⁺-Li collisions: A multi-electron perspective. *Institute of Physics Conference Series*, 601(1), 012010. doi:10.1088/1742-6596/601/1/012010

Spruck, K., Becker, A., Fellenberger, F., Grieser, M., von Hahn, R., Novotny, O., ... Krantz, C. (2015). An efficient, movable single-particle detector for use in cryogenic ultra-high vacuum environments. *Review of Scientific Instruments*, 86(2), 023303, -. doi:10.1063/1.4907352

- Steinbrügge, R. F., Bernitt, S., Epp, S. W., Rudolph, J. K., Beilmann, C., Bekker, H., ... Crespo López-Urrutia, J. R. (2015). Absolute measurement of radiative and Auger rates of K-shell-vacancy states in highly charged Fe ions. *Physical Review A*, *91*(3), 032502. doi:10.1103/PhysRevA.91.032502
- Stöhlker, T., Bagnoud, V., Blaum, K., Blazevic, A., Bräuning-Demian, A., Durante, M., ... Widmann, E. (2015). APPA at FAIR: From fundamental to applied research. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, *365*(Part B), 680–685. doi:10.1016/j.nimb.2015.07.077
- Storey, J., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A., ... Zmeskal, J. (2015). Particle tracking at cryogenic temperatures: the Fast Annihilation Cryogenic Tracking (FACT) detector for the AEgis antimatter gravity experiment. *Journal of Instrumentation*, *10*, UNSP C02023. doi:10.1088/1748-0221/10/02/C02023
- Strub, P., Krueger, H., & Sterken, V. J. (2015). Sixteen Years of Ulysses Interstellar Dust Measurements in the Solar System. I. Mass Distribution and Gas-to-dust Mass Ratio. *Astrophysical Journal*, *812*(2), 140. doi:10.1088/0004-637X/812/2/140
- Sturm, S., Köhler, F., & Werth, G. (2015). The g-factor of highly charged ions. *Journal of Physics: Conference Series*, *599*(conference 1), 012043. doi:10.1088/1742-6596/599/1/012043
- Takamoto, M., & Kirk, J. G. (2015). Rapid cosmic-ray acceleration at perpendicular shocks in supernova remnants. *The Astronomical Journal*, *89*(1), 29. doi:10.1088/0004-637X/809/1/29
- Takamoto, M., Inoue, T., & Lazarian, A. (2015). Turbulent Reconnection in Relativistic Plasmas and Effects of Compressibility. *Astrophysical Journal*, *815*(1), 16. doi:10.1088/0004-637X/815/1/16
- Takamoto, M., Petri , J., & Baty, H. (2015). Thermal synchrotron radiation from RRMHD simulations of the double tearing mode reconnection - application to the Crab flares. *Monthly Notices of the Royal Astronomical Society*, *454*(3), 2972–2980. doi:10.1093/mnras/stv2163
- Tanyag, R. M. P., Bernardo, C., Jones, C. F., Bacellar, C., Ferguson, K. R., Anielski, D., ... Vilesov, A. F. (2015). Communication: X-ray coherent diffractive imaging by immersion in nanodroplets. *Structural Dynamics*, *2*(5), 051102. doi:10.1063/1.4933297
- Taylor, M. G. G. T., Alexander, C., Altobelli, N., Fulle, M., Fulchignoni, M., Grün, E., & Weissman, P. (2015). Rosetta begins its COMET TALE. *Science*, *347*(6220), 387–387. doi:10.1126/science.aaa4542
- Testera, G., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A., ... Zmeskal, J. (2015). The AEgis experiment. *Hyperfine Interactions*, *233*(1-3), 13–20. doi:10.1007/s10751-015-1165-5
- Tu, X. . L., Litvinov, Y. A., Blaum, K., Mei, B., Sun, B. H., Sun, Y., ... Zhang, Y. H. (2015). Indirect mass determination for the neutron-deficient nuclides ^{44}V , ^{48}Mn , ^{52}Co and ^{56}Cu . *Nuclear Physics A*, *945*, 89–94. doi:10.1016/j.nuclphysa.2015.09.016
- Tu, X. L., Mei, B., Zhang, Y. H., Xu, H. S., Litvinov, Y. A., Huang, W. J., ... Zhao., T. C. (2015). Study of projectile fragmentation reaction with isochronous mass spectrometry. *Physica Scripta T*, *2015*(T166), 014009. doi:10.1088/0031-8949/2015/T166/014009
- Ulmer, S., Smorra, C., Mooser, A., Franke, K., Nagahama, H., Schneider, G., ... Yamazaki, Y. (2015). High-precision comparison of the antiproton-to-proton charge-to-mass ratio. *Nature*, *524*(7564), 196–199. doi:10.1038/nature14861
- Volya, A., Weidenmüller, H. A., & Zelevinsky, V. (2015). Neutron Resonance Widths and the Porter-Thomas Distribution. *Physical Review Letters*, *115*(5), 052501. doi:10.1103/PhysRevLett.115.052501
- Wang, D.-W., Zhu, S.-Y., Evers, J., & Scully, M. O. (2015). High-frequency light reflector via low-frequency light control. *Physical Review A*, *91*(1), 011801. doi:10.1103/PhysRevA.91.011801
- Weidenmüller, H. A. (2015). Nuclear physics in Heidelberg in the years 1950 to 1980. Personal recollections. *European Physical Journal H*, *40*(3), 279–299. doi:10.1140/epjh/e2015-60019-4

Wienholtz, F., Atanasov, D., Kreim, S. W., Manea, V., Rosenbusch, M., Schweikhard, L., ... Wolf, R. (2015). Towards ultrahigh-resolution multi-reflection time-of-flight mass spectrometry at ISOLTRAP. *Physica Scripta T*, 2015(T166), 014068. doi:10.1088/0031-8949/2015/T166/014068

Windberger, A., Crespo López-Urrutia, J. R., Bekker, H., Oreshkina, N., Berengut, J. C., Bock, V., ... Versolato, O. O. (2015). Identification of the Predicted 5s–4f Level Crossing Optical Lines with Applications to Metrology and Searches for the Variation of Fundamental Constants. *Physical Review Letters*, 114(15), 150801. doi:10.1103/PhysRevLett.114.150801

Wolf, A. (2015). Negative Ions in Cold Storage. *Physics*, 8, 31. doi:10.1103/Physics.8.31

Wolf, A., Novotny, O., Buhr, H., Krantz, C., Schneider, I. F., Motapon, O., & Mezei, J. Z. (2015). The HD⁺ dissociative recombination rate coefficient at low temperature. *EPJ Web of Conferences*, 84, 01001. doi:10.1051/epjconf/20158401001

Wöllert, A., Klaiber, M., Bauke, H., & Keitel, C. H. (2015). Relativistic tunneling picture of electron-positron pair creation. *Physical Review D*, 91(6), 065022. doi:10.1103/PhysRevD.91.065022

Wöllert, A., Bauke, H., & Keitel, C. H. (2015). Spin polarized electron-positron pair production via elliptical polarized laser fields. *Physical Review D*, 91(12), 125026. doi:10.1103/PhysRevD.91.125026

Wolter, B., Pullen, M. G., Baudisch, M., Sclafani, M., Hemmer, M., Senftleben, A., ... Biegert, J. (2015). Strong-Field Physics with Mid-IR Fields. *Physical Review X*, 5(2), 021034. doi:10.1103/PhysRevX.5.021034

Woods, P., Blaum, K., Bosch, F., Heil, M., Litvinov, Y. A., & Reifarth, R. (2015). Nuclear astrophysics experiments at storage rings: midterm perspectives at GSI. *Physica Scripta T*, 2015(T166), 014002. doi:10.1088/0031-8949/2015/T166/014002

Wu, Y., Gunst, J., Wu, Y., Kumar, N., Keitel, C. H., & Pálffy, A. (2015). Direct and secondary nuclear excitation with x-ray free-electron lasers. *Physics of Plasmas*, 22(11), 112706. doi:10.1063/1.4935294

Xing, Y. M., Wang, M., Zhang, Y. H., Shuai, P., Xu, X., Chen, R. J., ... Zhou, X. H. (2015). First isochronous mass measurements with two time-of-flight detectors at CSRe. *Physica Scripta T*, 2015(T166), 014010. doi:10.1088/0031-8949/2015/T166/014010

Xu, X., Wang, M., Zhang, Y.-H., Xu, H.-S., Shuai, P., Tu, X.-L., ... Zhan, W.-L. (2015). Direct mass measurements of neutron-rich ⁸⁶Kr projectile fragments and the persistence of neutron magic number N=32 in Sc isotopes. *Chinese Physics C*, 39(10), 104001. doi:10.1088/1674-1137/39/10/104001

Xu, X. (2015). Why is the neutrino oscillation formula expanded in $\Delta m_{21}^2 / \Delta m_{32}^2$ still accurate near the solar resonance in matter? *Journal of High Energy Physics : JHEP*, 2015(10), 090. doi:10.1007/JHEP10(2015)090

Yaguna, C. E. (2015). Singlet-doublet Dirac dark matter. *Physical Review D*, 92(11), 115002. doi:10.1103/PhysRevD.92.115002

Yakaboylu, E., Klaiber, M., & Hatsagortsyan, K. Z. (2015). Above-threshold ionization with highly charged ions in super-strong laser fields: III. Spin effects and its dependence on laser polarization. *Physical Review A*, 91(6), 063407. doi:10.1103/PhysRevA.91.063407

Yan, X. L., Litvinov, Y. A., Bosch, F., Brandau, C., Chen, L., Geissel, H., ... Zhou, X. H. (2015). Schottky mass spectrometry on ¹⁵²Sm projectile fragments. *JPS Conference Proceedings*, 6, 030099. doi:10.7566/JP-SCP.6.030099

Yan, X. L., Bosch, F., Litvinov, Y. A., Nolden, F., Steck, M., Tu, X. L., ... Zhang, Y. H. (2015). Investigation of the momentum compaction factor of the ESR thorough Schottky mass measurements. *Physica Scripta T*, 2015(T166), 014045. doi:10.1088/0031-8949/2015/T166/014045

Yang, Z. Q., Ye d, D. F., Ding, T., Pfeifer, T., & Fu, L. B. (2015). Attosecond XUV absorption spectroscopy of doubly excited states in helium atoms dressed by a time-delayed femtosecond infrared laser. *Physical Review A: Atomic, Molecular, and Optical Physics*, 91(1), 013414, -. doi:10.1103/PhysRevA.91.013414

Yang, R., Jones, D. I., & Aharonian, F. A. (2015). Fermi-LAT observations of the Sagittarius B complex. *Astrophysics and Astrophysics*, 580, A90. doi:10.1051/0004-6361/201425233

Ye, D., Li, M., Fu, L., Liu, J., Gong, Q., Liu, Y., & Ullrich, J. H. (2015). Scaling Laws of the Two-Electron Sum-Energy Spectrum in Strong-Field Double Ionization. *Physical Review Letters*, 115(12), 123001. doi:10.1103/PhysRevLett.115.123001

Zhang, Y., Xu, H., & Litvinov, Y. A. (2015). Precision mass measurements of short-lived nuclides at the heavy-ion storage ring in Lanzhou. *JPS Conference Proceedings*, 6, 010019. doi:10.7566/JPSCP.6.010019

Zhaunerchyk, V., Kaminska, M., Mucke, M., Squibb, R. J., Eland, J. H. D., Piancastelli, M. N., ... Feifel, R. (2015). Disentangling formation of multiple-core holes in aminophenol molecules exposed to bright X-FEL radiation. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 48(24), 244003. doi:10.1088/0953-4075/48/24/244003

Conference Papers 2015

- Aharonian, F. A. (2015). Cosmic particle acceleration after a decade of VHE gamma-ray observations. *Proceedings of Science*, ICRC2015: 003.
- Al Maalouf, E. J., Ren, X., Dorn, A., & Denifl, S. (2015). Experimental evidence for two decay channels in electron impact ionization and fragmentation of argon dimer. *Journal of Physics: Conference Series*, 635: 072062. doi:10.1088/1742-6596/635/7/072062.
- Argenti, L., Jimenez-Galan, A., Marante, C., Ott, C. R., Pfeifer, T., & Martin, F. (2015). Dressing Effects in the Attosecond Transient Absorption Spectra of Doubly-Excited States in Helium. *Journal of Physics: Conference Series*, 635: 092015. doi:10.1088/1742-6596/635/9/092015.
- Badnell, N. R., Spruck, K., Krantz, C., Novotny, O., Becker, A., Bernhardt, D., Grieser, M., Hahn, M., Repnow, R., Savin, D. W., Wolf, A., Mueller, A., & Schippers, S. (2015). Electron-ion recombination of the open-4f-shell ion W¹⁹⁺. *Journal of Physics: Conference Series*, 635: 052003. doi:10.1088/1742-6596/635/5/052003.
- Balzer, A., Brun, F., Brun, P., Domainko, W., Fuessling, M., Hoischen, C., Pühlhofer, G., Reimer, A., & Rowell, G. (2015). The H.E.S.S. multi-messenger program. *Proceedings of Science*, ICRC2015: 726.
- Bauke, H., Ahrens, S., Keitel, C. H., & Grobe, R. (2015). Spin dynamics in relativistic light-matter interaction. *Proceedings of SPIE*, 9515: 95150L. doi:10.1117/12.2178191.
- Becker, A., Domesle, C., Geppert, W. D., Grieser, M., Krantz, C., Repnow, R., Savin, D. W., Schwalm, D., Wolf, A., Chen, Y., & Novotny, O. (2015). Dissociative recombination measurements of SH⁺ with cold electrons. *Journal of Physics: Conference Series*, 635: 072067. doi:10.1088/1742-6596/635/7/072067.
- Becker, A., Blaum, K., Breitenfeldt, C., Fellenberger, F., George, S., Wolf, A. (2015). The cryogenic storage ring CSR for collision experiments with state-controlled and phase-space cooled molecular ion beams. *Journal of Physics: Conference Series*, 635: 072059. doi:10.1088/1742-6596/635/7/072059.
- Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., Caccianiga, B.,.... Zuzel, G. (2015). Neutrino Measurements from the Sun and Earth: Results from Borexino. *AIP Conference Proceedings*, 1666: 090002. doi:10.1063/1.4915567.
- Bernhardt, D., Becker, A., Grieser, M., Hahn, M., Krantz, C., Lestinsky, M., Novotny, O., Repnow, R., Spruck, K., Savin, D. W., Wolf, A., Mueller, A., & Schippers, S. (2015). Simultaneous measurement of photorecombination and electron-impact ionization of Fe¹⁴⁺ ions. *Journal of Physics: Conference Series*, 635: 052002. doi:10.1088/1742-6596/635/5/052002.
- Bomme, C., Anielski, D., Saveliev, E., Boll, R., Erk, B., Bari, S., Viehaus, J., Stener, M., Decleva, P., & Rolles, D. (2015). Diffraction effects in the Recoil-Frame Photoelectron Angular Distributions of Halomethanes. *Journal of Physics: Conference Series*, 635: 112020. doi:10.1088/1742-6596/635/11/112020.
- Bonardi, A., Buanes, T., Chadwick, P., Dazzi, F., Foerster, A., Hörandel, J., Punch, M., & Wagner, R. (2015). Central Acceptance Testing for Camera Technologies for the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 928.
- Bordas Coma, P. (2015). Detection of persistent sub GeV gamma-ray emission towards SS433/W50. *Proceedings of Science*, ICRC2015: 772.
- Borovik Jr., A., Schury, D., Ebinger, B., Spruck, K., Becker, A., Gharaibeh, M. F., Rausch, J., Schippers, S., & Mueller, A. (2015). Electron-impact ionization of tungsten ions. *Journal of Physics: Conference Series*, 635: 052040. doi:10.1088/1742-6596/635/5/052040.
- Bulgarelli, A., Fioretto, V., Zoli, A., Aboudan, A., Rodríguez-Vázquez, J. J.,... Wegner, P. (2015). The On-Site Analysis of the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 763. Retrieved from <http://arxiv.org/abs/1509.01963>.

Camus, N., Fechner, L., Arbo, D. G., Lemell, C., Nagele, S., Ullrich, J., Pfeifer, T., Lopez, S. D., Burgdoerfer, J., & Moshammer, R. (2015). Control of strong-field ionization with two-color laser pulses. *Journal of Physics: Conference Series*, 635: 092122. doi:10.1088/1742-6596/635/9/092122.

Chandrasekaran, V., Kafle, B., Prabhakaran, A., Heber, O., Rappaport, M. L., Rubinstein, H., Schwalm, D., Toker, Y., & Zajfman, D. (2015). Radiative stabilization of C_6^- . *Journal of Physics: Conference Series*, 635: 112108. doi:10.1088/1742-6596/635/11/112108.

Cologna, G., Chakraborty, N., Mohamed, M., Rieger, F. M., Romoli, C., Taylor, A. M., Wagner, S., Wierzcholska, A., Jacholkowska, A., & Kurtanidze, O. (2015). Spectral characteristics of Mrk501 during the 2012 and 2014 flaring states. *Proceedings of Science*, ICRC2015: 761.

Consolati, G., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A., ... Zmeskal, J. (2015). Experiments with low-energy antimatter. *EPJ Web of Conferences*, 96: 01007. doi:10.1051/epjconf/20159601007.

Contreras, J., Satalecka, K., Bernloehr, K., Boisson, C., Bregeon, J., Bulgarelli, A., Cesare, G. D., de los Reyes, R., Fioretti, V., Kosack, K., Lavalle, C., Lyard, E., Marx, R., Rico, J., Sanguillot, M., Servillat, M., Walter, R., Ward, J., & Zoli, A. (2015). Data model issues in the Cherenkov Telescope Array project. *Proceedings of Science*, ICRC2015: 960.

Cörlin, P., Fischer, A., Schönwald, M., Sperl, A., Mizuno, T., Thumm, U., Pfeifer, T., & Moshammer, R. (2015). Probing O_2^+ potential curves with an XUV IR pump probe experiment. *Journal of Physics Conference Series*, 635: 112060. doi:10.1088/1742-6596/635/11/112060.

de Naurois, M. (2015). The Very High Energy Sky from ~ 20 GeV to Hundreds of TeV - Selected Highlights. *Proceedings of Science*, ICRC2015: 021.

Deil, C., Brun, F., Carrigan, S., Chaves, R., Donath, A., Gast, H., Marandon, V., & Terrier, R. (2015). The H.E.S.S. Galactic plane survey. *Proceedings of Science*, ICRC2015: 773.

Deil, C., Mayer m, M., Terrier, R., Donath, A., King, J., Arribas, M. P., Ohm, S., Davids, I., & Willmann, P. (2015). H.E.S.S. data analysis with open source science tools. *Proceedings of Science*, ICRC2015: 778.

Donath, A., Brun, F., Carrigan, S., Chaves, R., Deil, C., Gast, H., Marandon, V., & Terrier, R. (2015). The H.E.S.S. Galactic plane survey poster. *Proceedings of Science*, ICRC2015: 782.

Donath, A., Deil, C., Arribas, M. P., King, J., Ellis, O., Terrier, R., Reichardt, I., Harris, J., Bühler, R., & Klepser, S. (2015). Gammapy: An open-source Python package for gamma-ray astronomy. *Proceedings of Science*, ICRC2015: 789.

Doro, M., Daniel, M., De los Reyes, R., Gaug, M., & Maccarone, M. C. (2015). Strategy implementation for the CTA Atmospheric monitoring program. *EPJ Web of Conferences*, 89: 02005. doi:10.1051/epjconf/20158902005.

Eger, P. (2015). Supernova remnants and pulsar wind nebulae with Imaging Atmospheric Cherenkov Telescopes (IACTs). *Journal of Physics: Conference Series*, 632: 012036. doi:10.1088/1742-6596/632/1/012036.

Eger, P., Parsons, R. D., Berge, D., Zabalza, V., Aharonian, F. A., Funk, S., Uchiyama, Y., & Bryan, M. (2015). H.E.S.S. precision measurements of the SNR RX J1713.7-3946. *Proceedings of Science*, ICRC2015: 766.

Eger, P., Domainko, W., & Hahn, J. (2015). Exploring the potential X-ray counterpart of the puzzling TeV gamma-ray source HESS J1507-622 with new Suzaku observations. *Proceedings of Science*, ICRC2015: 767.

Gadola, A., Bauer, C., Eisenkolb, F., Maciuc, F., Föhr, C., Garrecht, F., ... Zietar, K. (2015). FlashCam: a novel Cherenkov telescope camera with continuous signal digitization. *Journal of Instrumentation*, 10(1): C01014. doi:10.1088/1748-0221/10/01/C01014.

Gaug, M., Berge, D., De los Reyes, R., Doro, M., Foerster, A., Maccarone, M., Parsons, R. D., & van Eldik, C. (2015). Calibration of the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 929.

- George, S., Blaum, K., Breitenfeldt, C., Göck, J., Karthein, J., Kolling, T., ... Wolf, A. (2015). Laser-induced delayed electron emission of Co_4^- anions. *Journal of Physics: Conference Series*, 635: 112054. doi:10.1088/1742-6596/635/11/112054.
- Giavitto, G., Ashton, T., Balzer, A., Berge, D., Brun, F., Chaminade, T., ... Toussenel, F. (2015). A major electronics upgrade for the H.E.S.S. Cherenkov telescopes 1-4. *Proceedings of Science*, ICRC2015: 996. Retrieved from <http://arxiv.org/abs/1509.01232>.
- Gottschall, D., Foerster, A., Bonardi, A., Santangelo, A., & Puehlhofer, G. (2015). The Mirror Alignment and Control System for CT5 of the H.E.S.S. experiment. *Proceedings of Science*, ICRC2015: 1017.
- Hahn, J., & De los Reyes, R. (2015). Atmospheric monitoring in HESS. *EPJ Web of Conferences*, 89: 02002. doi:10.1051/epjconf/20158902002.
- Hahn, J., Fernandez, D., Casanova, S., Chaves, R., Marandon, V., Renaud, M., Safi-Harb, S., & Vink, J. (2015). Study of the Very High Energy Emission from the Galactic Supernova Remnant Population with H.E.S.S. *Proceedings of Science*, ICRC2015: 860.
- Hahn, J. (2015). GAMERA - a new modeling package for non-thermal spectral modeling. *Proceedings of Science*, ICRC2015: 917.
- Hayashida, M., Noda, K., Teshima, M., de Almeida, U. B., Chikawa, M., Cho, N., Fukami, S., Gadola, A., Hanabata, Y., Horns, D., Jablonski, C., Katagiri, H., Kagaya, M., Ogino, M., Okumura, A., Saito, T., Stadler, R., Steiner, S., Straumann, U., Vollhardt, A., Wetteskind, H., Yamamoto, T., & Yoshida, T. (2015). The Optical System for the Large Size Telescope of the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 927. Retrieved from <http://arxiv.org/abs/1508.07626>.
- Herwig, P., Zawatzky, K., Schwalm, D., Grieser, M., Heber, O., Jordon-Thaden, B., Krantz, C., Novotny, O., Repnow, R., Schurig, V., Vager, Z., Wolf, A., Trapp, O., & Kreckel, H. (2015). Determination of the absolute configuration of a chiral epoxide using foil induced Coulomb explosion imaging. *Journal of Physics: Conference Series*, 635: UNSP 012014. doi:10.1088/1742-6596/635/1/012014.
- Hillert, A., Parsons, R. D., & Brun, F. (2015). Improving H.E.S.S. cosmic-ray background rejection by means of a new Gamma-Ray Air Shower Parametrisation (GRASP). *Proceedings of Science*, ICRC2015: 775.
- Hossen, K., Dorn, A., & Ren, X. (2015). Molecular alignment resolved ($e, 2e$) cross sections for H_2 at 38 eV impact energy. *Journal of Physics: Conference Series*, 635: 072080. doi:10.1088/1742-6596/635/7/072080.
- Kadhane, U. R., Mishra, P. M., Rajput, J., Safvan, C. P., & Vig, S. (2015). Monte Carlo simulation for ion-molecule collisions at intermediate velocity. *Journal of Physics: Conference Series*, 635: 032075. doi:10.1088/1742-6596/635/3/032075.
- Kaldun, A., Ott, C. R., Stooß, V., Fischer, A., Blättermann, A., Ding, T., Raith, P., Meyer, K., Laux, M., Evers, J., Keitel, C. H., Greene, C. H., & Pfeifer, T. (2015). Fano Resonances in the Time Domain. *Journal of Physics: Conference Series*, 635: 092079. doi:10.1088/1742-6596/635/9/092079.
- Kastirke, G., Hartung, A., Schmidt, L. P. H., Jahnke, T., Schoeffler, M. S., Moshammer, R., Meyer, M., & Doerner, R. (2015). Designing a COLTRIMS Reaction-Microscope for multi-hit coincident measurements with the SQS instrument at European XFEL. *Journal of Physics: Conference Series*, 635: 112082. doi:10.1088/1742-6596/635/11/112082.
- Kimura, M., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Belov, A., ... Zmeska, J. (2015). Testing the Weak Equivalence Principle with an antimatter beam at CERN. *Journal of Physics: Conference Series*, 631: 012047. doi:10.1088/1742-6596/631/1/012047.
- Knöldseder, J., Beckmann, V., Boisson, C., Brau-Nogué, S., Deil, C., Khélifi, B., Mayer, M., Walter, R. (2015). Observer Access to the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 781. Retrieved from <http://arxiv.org/abs/1508.06078>.

- Kumar, S., Bizenberger, P., Blaum, K., Breitenfeldt, C., Göck, J., Groezinger, U., Henning, T., Karthein, J., Kern, B., Meyer, C., Rouille, G., Strelnikov, D., Wolf, A., George, S., & Kreckel, H. (2015). Toward laser-induced vibrational emission spectroscopy of C_{60}^+ . *Journal of Physics: Conference Series*, 635: 112072. doi:10.1088/1742-6596/635/11/112072.
- Leach, K. G., Lennarz, A., Grossheim, A., Klawitter, R., Brunner, T., ... Dilling, J. (2015). Low-Background In-Trap Decay Spectroscopy with TITAN at TRIUMF. In *JPS Conference Proceedings*. The Physical Society of Japan. doi:10.7566/JPSCP.6.020040.
- Li, J.-X., & Hatsagortsyan, K. Z. (2015). Robust signatures of quantum radiation reaction with an electron beam in a focused laser pulse. *Proceedings of SPIE*, 9515: 95150W1. doi:10.1117/12.2181534.
- Maneschg, W. (2015). Review of neutrinoless double beta decay experiments: Present status and near future. *Nuclear and Particle Physics Proceedings*, 260, 188-193.
- Mariaud, C., Bordas Coma, P., Aharonian, F., Dubus, G., Boettcher, M., de Naurois, M., Romoli, C., & Zabalza, V. (2015). H.E.S.S. observations of LS 5039. *Proceedings of Science*, ICRC2015: 885.
- Mariaud, C., Bordas, P., Aharonian, F., Boettcher, M., Dubus, G., de Naurois, M., & Romoli, C. (2015). VHE observations of the gamma-ray binary system LS 5039 with H.E.S.S. *Proceedings of Science*, ICRC2015: 885. Retrieved from <http://arxiv.org/abs/1509.05791>.
- Meyer, K., Liu, Z., Müller, N., Mewes, J., Dreuw, A., Buckup, T., Motzkus, M., & Pfeifer, T. (2015). Signatures and control of strong-field dynamics in a complex system. *Proceedings of the National Academy of Sciences of the United States of America*, 112(51), 15613-15618.
- Mi, Y., Camus, N., Laux, M., Fechner, L., Moshammer, R., & Pfeifer, T. (2015). Ionization atoms and molecules in a strong two-color field. *Journal of Physics: Conference Series*, 635: 092093. doi:10.1088/1742-6596/635/9/092093.
- Mishra, P. M., Blaum, K., Breitenfeldt, C., George, S., Göck, J., Grieser, M., ... Wolf, A. (2015). An ion source platform of the cryogenic storage ring (CSR). *Journal of Physics: Conference Series*, 635: 112061. doi:10.1088/1742-6596/635/11/112061.
- Mitchell, A., Parsons, R. D., & Marandon, V. (2015). A Generic Algorithm for IACT Optical Efficiency Calibration using Muons. *Proceedings of Science*, ICRC2015: 756.
- Mosteiro, P., Bellini, G., Benziger, J., Bick, D., Bonfini, G., Bravo, D., ... Zuzel, G. (2015). Low-energy (anti) neutrino physics with Borexino: Neutrinos from the primary proton-proton fusion process in the Sun. *Nuclear and Particle Physics Proceedings*, 265-266, 87-92.
- Mueller, D. W., Knudsen, E. J., Boddle, R., Armitage, S., Dorn, A., Buckman, S. J., & Sullivan, J. P. (2015). Triply Differential Measurements for Positron Impact Ionization of Argon. *Journal of Physics: Conference Series*, 635: 052068. doi:10.1088/1742-6596/635/5/052068.
- Murach, T., Gajdus, M., & Parsons, R. D. (2015). A Neural Network-based Reconstruction Algorithm for monoscopically detected Air Showers observed with the H.E.S.S. Experiment. *Proceedings of Science*, ICRC2015: 1022.
- Nakamori, T., Katagiri, H., Sano, H., Yamazaki, R., Ohira, Y., Bamba, A., Yoshikoshi, T. (2015). Simulating Cherenkov Telescope Array observation of RX J1713.7-3946. *Proceedings of Science*, ICRC2015: 774. Retrieved from <http://arxiv.org/abs/1508.06052>.
- Novotny, O., Allgeier, S., Enss, C., Fleischmann, A., Gamer, L., Hengstler, D., Kempf, S., Krantz, C., Pabinger, A., Pies, C., Savin, D. W., Schwalm, D., & Wolf, A. (2015). Cryogenic micro-calorimeters for mass spectrometry of keV neutral atoms and molecules. *Journal of Physics: Conference Series*, 635: UNSP 032023. doi:10.1088/1742-6596/635/3/032023.
- O'Connor, A., Grieser, M., Grussie, F., Urbain, X., & Kreckel, H. (2015). An experimental apparatus for

cold ion-atom collisions at the Cryogenic Storage Ring. *Journal of Physics: Conference Series*, 635: 032073. doi:10.1088/1742-6596/635/3/032073.

Ohm, S., Zabalza, V., Hinton, J., & Parkin, E. (2015). Time-dependent modelling of particle acceleration and non-thermal emission in Eta Carina. *Proceedings of Science*, ICRC2015: 913.

Okumura, A., Noda, K., & Rulten, C. (2015). ROBAST: Development of a Non-Sequential Ray-Tracing Simulation Library and its Applications in the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 951. Retrieved from <http://arxiv.org/abs/1508.07803>.

Oya, I., Casanova, S., Aharonian, F., & Dalton, M. (2015). HESS J1641-463, a very hard spectrum TeV gamma-ray source in the Galactic plane. *Proceedings of Science*, ICRC2015: 834.

Parsons, R. D., Murach, T., & Gajdus, M. (2015). H.E.S.S. II Data Analysis with ImPACT. *Proceedings of Science*, ICRC2015: 826.

Parsons, R. D., Holler, M., King, J., lefranc, V., Moulin, E., Poon, H., Veh, J., & Viana, A. (2015). Sgr A* Observations with H.E.S.S. II. *Proceedings of Science*, ICRC2015: 830.

Parsons, R. D., Balzer, A., Fuessling, M., Hoischen, C., Holler, M., Mitchell, A., Puehlhofer, G., Rowell, G., Wagner, S., Bissaldi, E., O'Brien, P., & Tam, T. (2015). The H.E.S.S. II GRB Observation Program. *Proceedings of Science*, ICRC2015: 853.

Parsons, R. D., Balzer, A., Füssling, M., Hoischen, C., Holler, M., Mitchell, A. ... Tam(2015). The H.E.S.S. II GRB Program. *Proceedings of Science*, ICRC2015: 853. Retrieved from <http://arxiv.org/abs/1509.05191>.

Pflüger, T., Ren, X., Weyland, M., Baek, W., Rabus, H., & Dorn, A. (2015). Towards electron-impact dissociation dynamics of biologically relevant molecules in a reaction microscope. *Journal of Physics: Conference Series*, 635: 072012. doi:10.1088/1742-6596/635/7/072012.

Pflüger, T., Ren, X., & Dorn, A. (2015). Signatures of Interatomic-Coulombic-Decay in electron-impact ionization of argon dimers. *Journal of Physics: Conference Series*, 635: 072011. doi:10.1088/1742-6596/635/7/072011.

Puehlhofer, G., Brun, F., Capasso, M., Chaves, R., Deil, C., Djannati-Ataï, A., ... Bamba, A. (2015). Search for new supernova remnant shells in the Galactic plane with H.E.S.S. *Proceedings of Science*, ICRC2015: 886.

Pullen, M. G., Wolter, B., Le, A.-T., Baudisch, M., Hemmer, M., Senftleben, A., Sclafani, M., Schroter, C. D., Ullrich, J., Moshammer, R., Lin, C.-D., & Biegert, J. (2015). Polyatomic molecular structure retrieval using laser-induced electron diffraction. *Journal of Physics: Conference Series*, 635: 072051. doi:10.1088/1742-6596/635/7/072051.

Purohit, G., Singh, P., Dorn, A., & Patidar, V. (2015). Calculation of FDSC for the low and intermediate energy electron impact ionization of water molecules. *Journal of Physics Conference Series*, 635: 072033. doi:10.1088/1742-6596/635/7/072033.

Purohit, G., Singh, P., Dorn, A., & Patidar, V. (2015). Calculation of FDSC for the low and intermediate energy electron impact ionization of water molecules. *Journal of Physics: Conference Series*, 635: UNSP 012031. doi:10.1088/1742-6596/635/1/012031.

Razzaque, S., & Smirnov, A. Y. (2015). Super-PINGU for measuring CP violation. *Nuclear and Particle Physics Proceedings*, 265-266, 183-185.

Ren, X., Pflüger, T., Weyland, M., Baek, W. Y., Rabus, H., Ullrich, J., & Dorn, A. (2015). High resolution (e, 2e+ion) study of low-energy electron-impact ionization and fragmentation of tetrahydrofuran. *Journal of Physics: Conference Series*, 635: 072008. doi:10.1088/1742-6596/635/7/072008.

Ren, X., Amami, S., Zatsarinny, O., Pflüger, T., Weyland, M., Baek, W. Y., Rabus, H., Bartschat, K., Madison, D., & Dorn, A. (2015). Low-energy (E=65 eV) electron-impact ionization of neon: Internormalized triple-differential cross sections in 3D kinematics. *Journal of Physics: Conference Series*, 635: 052021.

doi:10.1088/1742-6596/635/5/052021.

Romoli, C., Bordas Coma, P., Mariaud, C., Aharonian, F., de Naurois, M., Puehlhofer, G., Schwanke, U., van Soelen, B., Sushch, I., & Zabalza, V. (2015). H.E.S.S. observations of PSR B1259-63 during its 2014 periastron passage. *Proceedings of Science*, ICRC2015: 873.

Rousselle, J., Byrum, K., Cameron, R., Connaughton, V., Errando, M., ... Vassiliev, V. (2015). Construction of a Schwarzschild-Couder telescope as a candidate for the Cherenkov Telescope Array: status of the optical system. *Proceedings of Science*, ICRC2015: 938. Retrieved from <http://arxiv.org/abs/1509.01143>.

Saha, K., Prabhakaran, A., Rappaport, M. L., Heber, O., Schwalm, D., & Zajfman, D. (2015). A VMI setup to study prompt and delayed electron emission from trapped cluster anions. *Journal of Physics: Conference Series*, 635: 112103. doi:10.1088/1742-6596/635/11/112103.

Salamin, Y. I., Li, J.-X., Hatsagortsyan, K. Z., Tamburini, M., Di Piazza, A., & Keitel, C. H. (2015). Particle beams in ultrastrong laser fields: direct laser acceleration and radiation reaction effects. *Institute of Physics Conference Series*, 594: 012018. doi:10.1088/1742-6596/594/1/012018.

Sarri, G., Corvan, D. J., Cole, J. M., Schumaker, W., Di Piazza, A., Ahmed, ... Zepf, M. (2015). Laser-driven Thomson scattering for the generation of ultra-bright multi-MeV gamma-ray beams. *Proceedings of SPIE*, 9514: 95140W. doi:10.1117/12.2182569.

Schmelling, M. for the LHCb Collaboration (2015). Soft QCD measurements in the forward acceptance at the LHC. *Nuclear and Particle Physics Proceedings*, 258-259, 219-222.

Schmoeger, L., Versolato, O., Schwarz, M., Kohnen, M., Windberger, A., Crespo López-Urrutia, J. R. (2015). Coulomb crystallization of highly charged ions. *Journal of Physics: Conference Series*, 635: 022059. doi:10.1088/1742-6596/635/2/022059.

Schüssler, F., Balzer, A., Brun, F., Brun, P., Domainko, W., Fuessling, M., Hoischen, C., Pühlhofer, G., Reimer, A., Rowell, G., & Collaboration, f. t. H. E. S. S. (2015). The H.E.S.S. multi-messenger program. *Proceedings of Science*, ICRC2015: 1022. Retrieved from <http://arxiv.org/abs/1509.03035>.

Shah, C., Joerg, H., Hu, Z., Bernitt, S., Bekker, H., Blessenohl, M., Hollain, D., Tashenov, S. (2015). Linear polarization of x rays due to dielectronic recombination into highly charged ions. *Journal of Physics: Conference Series*, 635: 052091. doi:10.1088/1742-6596/635/5/052091.

Shah, C., Amaro, P., Steinbrügge, R. F., Beilmann, C., Bernitt, S., Fritzsch, S., Tashenov, S. (2015). Complete measurements of anisotropic x-ray emission following recombination of highly charged ions. *Journal of Physics: Conference Series*, 635: 052092. doi:10.1088/1742-6596/635/5/052093.

Smirnov, A. Y. (2015). Riddle of the Neutrino Mass. *Nuclear and Particle Physics Proceedings*, 265-266, 1-6.

Steinbrügge, R. F., Bernitt, S., Rudolph, J. K., & Crespo López-Urrutia, J. R. (2015). Absolute radiative and Auger transition rates of K-shell excited few-electron iron ions. *Journal of Physics: Conference Series*, 635: 092146. doi:10.1088/1742-6596/635/9/092146.

Tibaldo, L., Vandenbroucke, J., Albert, A., Funk, S., Kawashima, T., Kraus, M., Okumura, A., Sapozhnikov, L., Tajima, H., Varner, G., & Zink, A. (2015). TARGET: toward a solution for the readout electronics of the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 932.

Trichard, C., Fiasson, A., & Marandon, V. (2015). Evidence of two VHE gamma-ray sources in the W51 region. *Proceedings of Science*, ICRC2015: 832.

van Eldik, C., Holler, M., Berge, D., Zaborov, D., Lenain, J., Marandon, V., Murach, T., Prokoph, H., de Naurois, M., & Parsons, R. D. (2015). Observations of the Crab Nebula with H.E.S.S. phase II. *Proceedings of Science*, ICRC2015: 847.

Viana, A., Aharonian, F., Gabici, S., Kosack, K., Moulin, E., Parsons, R. D., & Tuffs, R. J. (2015). On the origin of the very-high energy gamma-ray emission of the Galactic Center region. *Proceedings of Science*,

- Voss, H. (2015). Successes, Challenges and Future Outlook of Multivariate Analysis In HEP. *Journal of Physics: Conference Series*, 608: 012058. doi:10.1088/1742-6596/608/1/012058.
- Wang, X., Ren, X., & Dorn, A. (2015). An (e, 2e+ion) study of low-energy electron-impact ionization and fragmentation of carbon dioxide. *Journal of Physics: Conference Series*, 635: 072022. doi:10.1088/1742-6596/635/7/072022.
- Weinstein, A., Aliu, E., Casanova, S., di Girolamo, T., Dyrda, M., Hahn, J., Majumdar, P., Rodriguez, J., & Tibaldo, L. (2015). Creating a high-resolution picture of Cygnus with the Cherenkov Telescope Array. *Proceedings of Science*, ICRC2015: 824.
- Weyland, M., Ren, X., Pflueger, T., Dorn, A., Baek, W. Y., & Rabus, H. (2015). Momentum imaging of dissociative electron attachment in biologically relevant molecules. *Journal of Physics Conference Series*, 635: 072013. doi:10.1088/1742-6596/635/7/072013.
- Windberger, A., Schmidt, P. O., & Crespo López-Urrutia, J. R. (2015). Optical transitions at the 5s-4f level crossing with high sensitivity to a time variation of the fine structure constant alpha. *Journal of Physics: Conference Series*, 635: 092145. doi:10.1088/1742-6596/635/9/092145.
- Wolter, B., Lemell, C., Baudisch, M., Pullen, M. G., Tong, X.-M., ... Biegert, J. (2015). Origins of Very-Low and Zero-Energy Electron Structures in Strong-Field Ionization with Intense Mid-IR Pulses. *Journal of Physics: Conference Series*, 635: 052055. doi:10.1088/1742-6596/635/5/052055.
- Zaborov, D., Romoli, C., Taylor, A. M., Lenain, J., Sanchez, D., & Parsons, R. D. (2015). AGN observations with a 100 GeV threshold using H.E.S.S. II. *Proceedings of Science*, ICRC2015: 808.

Books and Book Chapters 2015

Akhmedov, E. K. (2015). Majorana neutrinos and other Majorana particles: theory and experiment. In: S. Esposito (Ed.), *The Physics of Ettore Majorana : Theoretical, Mathematical, and Phenomenological* (pp. 303–353). Cambridge: Cambridge University Press. doi:10.1017/CBO9781107358362.015

Kreckel, H., & Savin, D. W. (2015). Negative Ion Chemistry in the Early Universe. In: S. Schlemmer, T. Giesen, & H. Mutschke (Eds.), *Laboratory Astrochemistry: From Molecules through Nanoparticles to Grains* (pp. 205–228). Weinheim: Wiley-VCH.

Publications 2016

Journals Articles

- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of the properties of the Ξ_b^{*0} baryon. *Journal of High Energy Physics : JHEP*, 2016(5), 161. doi:10.1007/JHEP05(2016)161
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Search for violations of Lorentz invariance and CPT symmetry in $B_{(s)}^0$ mixing. *Physical Review Letters*, 116(24), 241601. doi:10.1103/PhysRevLett.116.241601
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of forward W and Z boson production in association with jets in proton-proton collisions at $\sqrt{s}=8$ TeV. *Journal of High Energy Physics : JHEP*, 2016(5), 131. doi:10.1007/JHEP05(2016)131
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Observations of $\Lambda_b^0 \rightarrow \Lambda K^+ \pi^-$ and $\Lambda_b^0 \rightarrow \Lambda K^+ K^-$ decays and searches for other Λ_b^0 and Ξ_b^0 decays to $\Lambda h^+ h^-$ final states. *Journal of High Energy Physics : JHEP*, 2016(05), 081. doi:10.1007/JHEP05(2016)081
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Observation of the $\Lambda_b^0 \rightarrow \Lambda \phi$ decay. *Physics Letters B*, 759, 282–292. doi:10.1016/j.physletb.2016.05.077
- Aaij, R., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Search for structure in the $B_s^0 \pi^\pm$ invariant mass spectrum. *Physical Review Letters*, 117(15), 152003. doi:10.1103/PhysRevLett.117.152003
- Aaij, R., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Amplitude analysis of $B^- \rightarrow D^+ \pi^- \pi^-$ decays. *Physical Review D*, 94(07), 072001. doi:10.1103/PhysRevD.94.072001
- Aaij, R., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of forward $W \rightarrow e\nu$ production in pp collisions at $\sqrt{s}=8$ TeV. *Journal of High Energy Physics : JHEP*, 2016(10), 030. doi:10.1007/JHEP10(2016)030
- Aaij, R., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of the forward Z boson production cross-section in pp collisions at $\sqrt{s} = 13$ TeV. *Journal of High Energy Physics : JHEP*, 2016(09), 136. doi:10.1007/JHEP09(2016)136
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., ... LHCb Collaboration (2016). Evidence for exotic hadron contributions to Λ_b^0 to $J/\psi p\pi^-$ decays. *Physical Review Letters*, 117(08), 082003. doi:10.1103/PhysRevLett.117.082003
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Search for B_c^+ decays to the $p\bar{p}\pi^+$ final state. *Physics Letters B*, 759, 313–321. doi:10.1016/j.physletb.2016.05.074
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Observation of $\Lambda_b^0 \rightarrow \psi(2S)pK^-$ and $\Lambda_b^0 \rightarrow J/\psi\pi^+\pi^- pK^-$ decays and a measurement of the Λ_b^0 baryon mass. *Journal of High Energy Physics : JHEP*, 2016(05), 132. doi:10.1007/JHEP05(2016)132
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Study of $\psi(2S)$ production and cold nuclear matter effects in pPb collisions at $\sqrt{s}_{NN}=5$ TeV. *Journal of High Energy Physics : JHEP*, 2016(03), 133. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-002B-22E5-9>
- Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). First observation of $D^0-\bar{D}^0$ oscillations in $D^0 \rightarrow K^+\pi^-\pi^+\pi^-$ decays and measurement of the associated coherence parameters. *Physical Review Letters*, 116(24), 241801. doi:10.1103/PhysRevLett.116.241801

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Measurement of the difference of time-integrated CP asymmetries in $D^0 \rightarrow K^-K^+$ and $D^0 \rightarrow \pi^-\pi^+$ decays. *Physical Review Letters*, 116(19), 191601. doi:10.1103/PhysRevLett.116.191601

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). First observation of the rare $B^+ \rightarrow D^+K^+\pi^-$ decay. *Physical Review D*, 93(05), 051101. doi:10.1103/PhysRevD.93.051101

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). A new algorithm for identifying the flavour of B_s^0 mesons at LHCb. *Journal of Instrumentation*, 11, P05010. doi:10.1088/1748-0221/11/05/P05010

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Measurement of the mass and lifetime of the Ω_b^- baryon. *Physical Review D*, 93(09), 092007. doi:10.1103/PhysRevD.93.092007

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Study of the production of A_b^0 and \bar{B}^0 hadrons in pp collisions and first measurement of the $A_b^0 \rightarrow J/\psi p K^-$ branching fraction. *Chinese Physics C*, 40(1), 011001. doi:10.1088/1674-1137/40/1/011001

Aaij, R., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... Zhong, L. (2016). First observation of the decay $B_s^0 \rightarrow K_s^0 K^*(892)^0$ at LHCb. *Journal of High Energy Physics : JHEP*, 2016(1), 012. doi:10.1007/JHEP01(2016)012

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Measurement of forward W and Z boson production in pp collisions at $\sqrt{s}=8\text{TeV}$. *Journal of High Energy Physics : JHEP*, 2016(1), 155. doi:10.1007/JHEP01(2016)155

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Angular analysis of the $B^0 \rightarrow K^{*0} \mu^+ \mu^-$ decay using 3 fb^{-1} of integrated luminosity. *Journal of High Energy Physics : JHEP*, 2016(2), 104. doi:10.1007/JHEP02(2016)104

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Measurements of prompt charm production cross-sections in pp collisions at $\sqrt{s}=13\text{ TeV}$. *Journal of High Energy Physics : JHEP*, 2016(3), 159. doi:10.1007/JHEP03(2016)159

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Observation of $B_s^0 \rightarrow \bar{D}^0 K_s^0$ and Evidence for $B_s^0 \rightarrow \bar{D}^{*0} K_s^0$. *Physical Review Letters*, 116(16), 161802. doi:10.1103/PhysRevLett.116.161802

Aaij, R., Abellan Beteta, C., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Measurement of the $B_s^0 \rightarrow D_s^{(*)+} D_s^{(*)-}$ branching fractions. *Physical Review D*, 93(9), 092008. doi:10.1103/PhysRevD.93.092008

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). Constraints on the unitarity triangle angle γ from Dalitz plot analysis of $B^0 \rightarrow DK^+\pi^-$ decays. *Physical Review D*, 93(11), 112018. doi:10.1103/PhysRevD.93.112018

Aaij, R., Beteta, C. A., Adinolfi, M., Affolder, A., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Production of associated Y and open charm hadrons in pp collisions at $\sqrt{s}=7$ and 8 TeV via double parton scattering. *Journal of High Energy Physics : JHEP*, 2016(7), 052. doi:10.1007/JHEP07(2016)052

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Affolder, A., Ajaltouni, Z., ... LHCb Collaboration (2016). A precise measurement of the B^0 meson oscillation frequency. *European Physical Journal C*, 76(7), 412. doi:10.1140/epjc/s10052-016-4250-2

Aaij, R., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., Albrecht, J., ... LHCb Collaboration (2016). Measurement of the CP Asymmetry in $B_s^0 - \bar{B}_s^0$ Mixing. *Physical Review Letters*, 117(6), 061803. doi:10.1103/PhysRevLett.117.061803

Aaij, R., Abellan Beteta, C., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of the CKM angle gamma using $B^0 \rightarrow DK^{*0}$ with $D \rightarrow K_S^0 \pi^+ \pi^-$ decays. *Journal of High Energy Physics : JHEP*, 2016(8), 137. doi:10.1007/JHEP08(2016)137

Aaij, R., Beteta, C. A., Adeva, B., Adinolfi, M., Ajaltouni, Z., Akar, S., ... LHCb Collaboration (2016). Measurement of CP observables in $B^\pm \rightarrow DK^\pm$ and $B^\pm \rightarrow D\pi^\pm$ with two- and four-body D decays. *Physics Letters B*, 760, 117–131. doi:10.1016/j.physletb.2016.06.022

Abdallah, H., Abramowski, A., Aharonian, F., Ait Benkhali, F., Akhperjanian, A. G., Anguener, E., ... Zywucka, N. (2016). Search for Dark Matter Annihilations towards the Inner Galactic Halo from 10 Years of Observations with HESS. *Physical Review Letters*, 117(11), 111301. doi:10.1103/PhysRevLett.117.111301

Abe, Y., Abrahao, T., Almazan, H., Alt, C., Appel, S., Barriere, J. C., ... Zimmer, V. (2016). Muon capture on light isotopes measured with the Double Chooz detector. *Physical Review C*, 93(5), 054608. doi:10.1103/PhysRevC.93.054608

Abe, Y., Abrahão, T., Almazan, H., Alt, C., Appel, S., ... Zimmer, V. (2016). Characterization of the Spontaneous Light Emission of the PMTs used in the Double Chooz Experiment. *Journal of Instrumentation*, 11(08), P08001. doi:10.1088/1748-0221/11/08/P08001

Abe, Y., Appel, S., Abrahão, T., Almazan, H., Alt, C., Anjos, J. C. dos, ... Zimmer, V. (2016). Measurement of θ_{13} in Double Chooz using neutron captures on hydrogen with novel background rejection techniques. *Journal of High Energy Physics : JHEP*, 2016(01), 163. doi:10.1007/JHEP01(2016)163

Abeysekara, A. U., Alfaro, R., Alvarez, C., Álvarez, J. D., Arceo, R., Arteaga-Velázquez, J. C., ... Zhou, H. (2016). Search for TeV Gamma-Ray Emission from Point-like Sources in the Inner Galactic Plane with a Partial Configuration of the HAWC Observatory. *Astrophysical Journal*, 817(1), 3. doi:10.3847/0004-637X/817/1/3

Abramowski, A., Aharonian, F., Ait Benkhali, F., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Zywucka, N. (2016). Acceleration of petaelectronvolt protons in the Galactic Centre. *Nature*, 531(7595), 476–479. doi:10.1038/nature17147

Abramowski, A., Aharonian, F., Benkhali, F. A., Akhperjanian, A. G., Angüner, E. O., Backes, M., ... Zywucka, N. (2016). Detailed spectral and morphological analysis of the shell type SNR RCW 86. *Astronomy and Astrophysics*. doi:10.1051/0004-6361/201526545

Ackermann, M., Ajello, M., Atwood, W. B., Baldini, L., Ballet, J., Barbiellini, G., ... Zimmer, S. (2016). 2FHL: The second catalog of hard Fermi-LAT sources. *Astrophysical Journal Supplement Series*, 222(1), 5. doi:10.3847/0067-0049/222/1/5

Ackermann, M., Ajello, M., Albert, A., Atwood, W. B., Baldini, L., Ballet, J., ... Rephaeli, Y. (2016). Search for Gamma-Ray Emission from the Coma Cluster with Six Years of Fermi-LAT Data. *Astrophysical Journal*, 819(2), 149. doi:10.3847/0004-637X/819/2/149

Ackermann, M., Ajello, M., Albert, A., Atwood, W. B., Baldini, L., Barbiellini, G., ... Yassine, M. (2016). Measurement of the high-energy gamma-ray emission from the Moon with the Fermi Large Area Telescope. *Physical Review D*, 93(8), 082001. doi:10.1103/PhysRevD.93.082001

Ackermann, M., Ajello, M., Albert, A., Atwood, W. B., Baldini, L., Ballet, J., ... Zimmer, S. (2016). Resolving the Extragalactic gamma-Ray Background above 50 GeV with the Fermi Large Area Telescope. *Physical Review Letters*, 116(15), 151105. doi:10.1103/PhysRevLett.116.151105

Ackermann, M., Ajello, M., Albert, A., Anderson, B., Arimoto, M., Atwood, W. B., ... Zimmer, S. (2016). Fermi-LAT Observations of the LIGO Event GW150914. *Astrophysical Journal, Letters*, 823(1), L2. doi:10.3847/2041-8205/823/1/L2

Adrián-Martínez, S., Ageron, M., Aharonian, F., Aiello, S., Albert, A., Ameli, F., ... Zúñiga, J. (2016). Letter of Intent for KM3NeT 2.0. *Journal of Physics G: Nuclear and Particle Physics*, 43(8), 084001.

doi:10.1088/0954-3899/43/8/084001

Aghion, S., Amsler, C., Ariga, A., Ariga, T., Bonomi, G., Braunig, P., ... Zurlo, N. (2016). Laser excitation of the n=3 level of positronium for antihydrogen production. *Physical Review A*, 94(1), 012507. doi:10.1103/PhysRevA.94.012507

Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Barros, N., ... Zuzel, G. (2016). Flux Modulations seen by the Muon Veto of the GERDA Experiment. *Astroparticle Physics*, 84, 29–35. doi:10.1016/j.astropartphys.2016.08.002

Agostini, M., Allardt, M., Andreotti, E., Bakalyarov, A. M., Balata, M., Barabanov, I., ... Zuze, G. (2016). Limit on Neutrinoless Double Beta Decay of ^{76}Ge by GERDA. *Physics Procedia*, 61, 828–837. doi:10.1016/j.phpro.2015.06.002

Agostini, M., Allardt, M., Bakalyarov, A. M., Balata, M., Barabanov, I., Baudis, L., ... Zuzel, G. (2016). Search of Neutrinoless Double Beta Decay with the GERDA Experiment. *Nuclear and Particle Physics Proceedings*, 273-275, 1882.

Ahnen, M. L., Ansoldi, S., Antonelli, L. A., Antoranz, P., Babic, A., Banerjee, B., ... Zanin, R. (2016). Search for VHE gamma-ray emission from Geminga pulsar and nebula with the MAGIC telescopes. *Astrophysics & Astronomy*, 591, A138. doi:10.1051/0004-6361/201527722

Ajello, M., Baldini, L., Barbarelli, G., Bastieri, D., Bellazzini, R., Bissaldi, E., ... Yassine, M. (2016). Deep Morphological and Spectral Study of the SNR RCW 86 with Fermi-LAT. *Astrophysical Journal*, 819(2), 98. doi:10.3847/0004-637X/819/2/98

Akhmedov, E. K., & Mirizzi, A. (2016). Another look at synchronized neutrino oscillations. *Nuclear Physics B*, 908, 382–407. doi:10.1016/j.nuclphysb.2016.02.011

Akhmedov, E. K. (2016). Atmospheric neutrinos, ν_e - ν_s oscillations, and a novel neutrino evolution equation. *Journal of High Energy Physics : JHEP*, 2016(08), 153. doi:10.1007/JHEP08(2016)153

Ali, E., Ren, X., Dorn, A., Ning, C., Colgan, J., & Madison, D. (2016). Experimental and theoretical triple-differential cross sections for tetrahydrofuran ionized by low-energy 26-eV-electron impact. *Physical Review A*, 93(6), 062705. doi:10.1103/PhysRevA.93.062705

Allanach, B., Queiroz, F., Strumia, A., & Sun, S. (2016). Z' models for the LHCb and g-2 muon anomalies. *Physical Review D*, 93(5), 055045. doi:10.1103/PhysRevD.93.055045

Alpaslan, M., Grootes, M., Marcum, P. M., Popescu, C., Tuffs, R. J., Bland-Hawthorn, J., ... Robotham, A. S. G. (2016). Galaxy And Mass Assembly (GAMA): stellar mass growth of spiral galaxies in the cosmic web. *Monthly Notices of the Royal Astronomical Society*, 457(3), 2287–2300. doi:10.1093/mnras/stw134

Alves, A., Camargo, D. A., Dias, A. G., Longas, R., Nishi, C. C., & Queiroz, F. (2016). Collider and Dark Matter Searches in the Inert Doublet Model from Peccei-Quinn Symmetry. *Journal of High Energy Physics : JHEP*, 2016(10), 15. doi:10.1007/JHEP10(2016)015

Ambrogi, L., De Ona Wilhelmi, E., & Aharonian, F. (2016). On the potential of atmospheric Cherenkov telescope arrays for resolving TeV gamma-ray sources in the Galactic plane. *Astroparticle Physics*, 80, 22–33. doi:10.1016/j.astropartphys.2016.03.004

Ambrosio, M. J., Mitnik, D. M., Dorn, A., Ancarani, L. U., & Gasaneo, G. (2016). Double ionization of helium by 2-keV electrons in equal- and unequal-energy configurations. *Physical Review A*, 93, 032705. doi:10.1103/PhysRevA.93.032705

Angioi, A., Mackenroth, F., & Di Piazza, A. (2016). Nonlinear single Compton scattering of an electron wave packet. *Physical Review A*, 93(5), 052102. doi:10.1103/PhysRevA.93.052102

Aprile, E., Aalbers, J., Agostini, F., Alfonsi, M., Amaro, F. D., ... Zhang, Y. (2016). A low-mass dark matter

search using ionization signals in XENON100. *Physical Review D*, *in press*. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-002B-B729-8>

Aprile, E., Aalbers, J., Agostini, F., Alfonsi, M., Amaro, F. D., ... Zhang, Y. (2016). Physics reach of the XENON1T dark matter experiment. *Journal of Cosmology and Astroparticle Physics*, *2016*(04), 027. doi:10.1088/1475-7516/2016/04/027

Archidiacono, M., Gariazzo, S., Giunti, C., Hannestad, S., Hansen, R., Laveder, M., & Tram, T. (2016). Pseudoscalar - sterile neutrino interactions: reconciling the cosmos with neutrino oscillations. *Journal of Cosmology and Astroparticle Physics*, *2016*, 067. doi:10.1088/1475-7516/2016/08/067

Babcock, C., Heylen, H., Bissell, M. L., Blaum, K., Campbell, P., Cheal, B., ... Yang, X. F. (2016). Quadrupole moments of odd-A $^{53-63}\text{Mn}$: Onset of collectivity towards N=40. *Physics Letters B*, *760*, 387–392. doi:10.1016/j.physletb.2016.07.016

Badnell, N. R., Spruck, K., Krantz, C., Novotny, O., Becker, A., Bernhardt , D., ... Schippers, S. (2016). Recombination of W^{19+} ions with electrons: Absolute rate coefficients from a storage-ring experiment and from theoretical calculations. *Physical Review A*, *93*(05), 052703. doi:10.1103/PhysRevA.93.052703

Bajc, B., & Smirnov, A. (2016). Hidden flavor symmetries of SO(10) GUT. *Nuclear Physics B*, *909*, 954–979. doi:10.1016/j.nuclphysb.2016.06.020

Baring, M. G., Ghosh, T., Queiroz, F., & Sinha, K. (2016). New limits on the dark matter lifetime from dwarf spheroidal galaxies using Fermi-LAT. *Physical Review D*, *93*(10), 103009. doi:10.1103/PhysRevD.93.103009

Beiersdorfer, P., Crespo López-Urrutia, J. R., & Träbert, E. (2016). Measurement of the radiative decay rate and energy of the metastable $(2\text{s}^2 \ 2\text{p}_{\frac{1}{2}}^5 \ 3\text{s}_{\frac{1}{2}})_{j=0}$ level in FeXVII. *The Astrophysical Journal*, *817*(1), 67. doi:10.3847/0004-637X/817/1/67

Belov, N., & Harman, Z. (2016). Pair creation in heavy ion channeling. *Physics Letters B*, *755*, 150–154. doi:10.1016/j.physletb.2016.01.064

Belov, N., & Harman, Z. (2016). Parity violation effects in the Josephson junction of a p-wave superconductor. *Physics Letters. A*, *380*(43), 3690–3695. doi:10.1016/j.physleta.2016.09.005

Bernhardt, D., Becker , A., Brandau, C., Grieser, M., Hahn, M., Krantz, C., ... Schippers, S. (2016). Absolute rate coefficients for photorecombination of beryllium-like and boron-like silicon ions. *Journal of Physics B: Atomic, Molecular and Optical Physics*, *49*(7), 074004. doi:10.1088/0953-4075/49/7/074004

Bissell, M. L., Carette, T., Flanagan, K. T., Vingerhoets, P., Billowes, J., Blaum, K., ... Yordanov, D. T. (2016). Cu charge radii reveal a weak sub-shell effect at N = 40. *Physical Review C*, *93*(6), 064318. doi:10.1103/PhysRevC.93.064318

Böhm, C., Sturm, S., Rischka, A., Dörr, A., Eliseev, S., Goncharov, M., ... Blaum, K. (2016). An ultra-stable voltage source for precision Penning-trap experiments. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, *828*, 125–131. doi:10.1016/j.nima.2016.05.044

Boireau, G., Bouvet, L., Collin, A. P., Coulloux, G., Cribier, M., Deschamp, H., ... Yermia, F. (2016). Online Monitoring of the Osiris Reactor with the Nucifer Neutrino Detector. *Physical Review D*, *93*(11), 112006. doi:10.1103/PhysRevD.93.112006

Boll, R., Erk, B., Coffee, R., Trippel, S., Kierspel, T., Bomme, C., ... Rudenko, A. (2016). Charge transfer in dissociating iodomethane and fluoromethane molecules ionized by intense femtosecond X-ray pulses. *Structural Dynamics*, *3*(4), 043207. doi:10.1063/1.4944344

Bourne, N., Dunne, L., Maddox, S. J., Dye, S., Furlanetto, C., Hoyos, C., ... Wright, A. H. (2016). The Herschel-ATLAS Data Release 1 Paper II: Multi-wavelength counterparts to submillimetre sources. *Monthly No-*

tices of the Royal Astronomical Society, 462, 1714–1734. doi:10.1093/mnras/stw1654

Breitenfeldt, C., Blaum, K., Froese, M. W., George, S., Guzán-Ramírez, G., Lange, M., ... Wolf, A. (2016). Decay processes and radiative cooling of small anionic copper clusters. *Physical Review A*, 94(03), 033407. doi:10.1103/PhysRevA.94.033407

Buck, C., & Yeh, M. (2016). Metal-loaded organic scintillators for neutrino physics. *Journal of Physics G: Nuclear and Particle Physics*, 43(9), 093001. doi:10.1088/0954-3899/43/9/093001

Buck, C., Collin, A., Haser, J. A., & Lindner, M. (2016). Investigating the Spectral Anomaly with Different Reactor Antineutrino Experiments. *Physics Letters B*, 765, 159–162. doi:10.1016/j.physletb.2016.11.062

Butler, P. A., Page, R. D., Blaum, K., Grieser, M., Davinson, T., Woods, P. J., ... Wenander, F. (2016). TSR: A storage ring for HIE-ISOLDE. *Acta Physica Polonica B*, 47(3), 627–636. doi:10.5506/APhysPolB.47.627

Butler, P. A., Blaum, K., Davinson, T., Flanagan, K., Freeman, S. J., Grieser, M., ... Woods, T. E. (2016). TSR: A storage and cooling ring for HIE-ISOLDE. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 376, 270–274. doi:10.1016/j.nimb.2015.12.006

Caldwell, A., Adli, E., Amorim, L., Apsimon, R., Argyropoulos, T., Assmann, R., ... Zimmermann, F. (2016). Path to AWAKE: Evolution of the concept. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 829, 3–16. doi:10.1016/j.nima.2015.12.050

Caminata, A., Agostini, M., Altenmueller, K., Appel, S., Bellini, G., Benziger, J., ... Zuzel, G. (2016). Search for sterile neutrinos with the SOX experiment. *Nuovo Cimento C*, 39(1), 236. doi:10.1393/ncc/i2016-16236-7

Caminata, A., Agostini, M., Altenmueller, K., Appel, S., Bellini, G., Benziger, J., ... Zuzel, G. (2016). Understanding the detector behavior through Montecarlo and calibration studies in view of the SOX measurement. *Institute of Physics Conference Series*, 675, 012012. doi:10.1088/1742-6596/675/1/012012

Caravita, R., Aghion, S., Amsler, C., Ariga, A., Ariga, T., Bonomi, G., ... Zmeskal, J. (2016). Towards a gravity measurement on cold antimatter atoms. *Nuovo Cimento C*, 39(1), 237. doi:10.1393/ncc/i2016-16237-6

Ceban, V., & Macovei, M. (2016). Cavity quantum interferences with three-level atoms. *Journal of the Optical Society of America B-Optical Physics*, 33(5), 942–946. doi:10.1364/JOSAB.33.000942

Chakraborty, S., Hansen, R., Izaguirre, I., & Raffelt, G. (2016). Collective neutrino flavor conversion: Recent developments. *Nuclear Physics B*, 908, 366–381. doi:10.1016/j.nuclphysb.2016.02.012

Chakraborty, S., Hansen, R. S. L., Izaguirre, I., & Raffelt, G. (2016). Self-induced neutrino flavor conversion without flavor mixing. *Journal of Cosmology and Astroparticle Physics*, 2016, 042. doi:10.1088/1475-7516/2016/03/042

Chang, X.-C., Liu, R., & Wang, X.-Y. (2016). How Far Away Are the Sources of IceCube Neutrinos? Constraints from the Diffuse Teraelectronvolt Gamma-ray Background. *Astrophysical Journal*, 825(2), 148. doi:10.3847/0004-637X/825/2/148

Charles, E., Sanchez-Conde, M., Anderson, B., Caputo, R., Cuoco, A., Di Mauro, M., ... Razzano, M. (2016). Sensitivity projections for dark matter searches with the Fermi large area telescope. *Physics Reports: Review Section of Physics Letters*, 636, 1–46. doi:10.1016/j.physrep.2016.05.001

Chauveau, P., Delahaye, P., De France, G., El Abir, S., Lory, J., Merrer, Y., ... Wolf, R. (2016). PILGRIM, a Multi-Reflection Time-of-Flight Mass Spectrometer for Spiral2-S-3 at GANIL. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 376, 211–215. doi:10.1016/j.nimb.2016.01.025

Chen, X., Sanjari, M. S., Huelsmann, P., Litvinov, Y. A., Nolden, F., Piotrowski, J., ... Walker, P. M. (2016). Intensity-sensitive and position-resolving cavity for heavy-ion storage rings. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 826, 39–47. doi:10.1016/j.nima.2016.04.056

- Chu, X., & Smirnov, A. (2016). Neutrino mixing and masses in SO(10) GUTs with hidden sector and flavor symmetries. *Journal of High Energy Physics : JHEP*, 2016(5), 035. doi: 10.1007/JHEP05(2016)135
- Crespo López-Urrutia, J. R. (2016). Frequency metrology using highly charged ions. *Journal of Physics: Conference Series*, 723(conf 1), 012052. doi:10.1088/1742-6596/723/1/012052
- Davies, L. J. M., Driver, S. P., Robotham, A. S. G., Grootes, M. W., Popescu, C. C., Tuffs, R. J., ... Bourne, N. (2016). GAMA/H-ATLAS: a meta-analysis of SFR indicators - comprehensive measures of the SFR-M* relation and cosmic star formation history at $z < 0.4$. *Monthly Notices of the Royal Astronomical Society*, 461(1), 458–485. doi:10.1093/mnras/stw1342
- Davini, S., Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., ... Zuzel, G. (2016). CNO and pep solar neutrino measurements and perspectives in Borexino. *Journal of Physics Conference Series*, 675, 012040. doi:10.1088/1742-6596/675/1/012040
- Deppisch, F. F., Graf, L., Kulkarni, S., Patra, S., Rodejohann, W., Sahu, N., & Sarkar, U. (2016). Reconciling the 2 TeV Excesses at the LHC in a Linear Seesaw Left-Right Model. *Physical Review D*, 93(1), 013011. doi:10.1103/PhysRevD.93.013011
- Dev, B., Mohapatra, R. N., & Zhang, Y. (2016). Quark seesaw, vectorlike fermions and diphoton excess. *Journal of High Energy Physics : JHEP*, 2016(2), 186. doi:10.1007/JHEP02(2016)186
- Dev, B., & Mazumdar, A. (2016). Probing the scale of new physics by Advanced LIGO/VIRGO. *Physical Review D*, 93(10), 104001. doi:10.1103/PhysRevD.93.104001
- Dev, B., Mohapatra, R. N., & Zhang, Y. (2016). Probing the Higgs sector of the minimal Left-Right symmetric model at future hadron colliders. *Journal of High Energy Physics : JHEP*, (5), 174. doi:10.1007/JHEP05(2016)174
- Dev, B., & Teresi, D. (2016). Asymmetric dark matter in the Sun and diphoton excess at the LHC. *Physical Review D*, 94(2), 025001. doi:10.1103/PhysRevD.94.025001
- Dev, B., Ghosh, D. K., & Rodejohann, W. (2016). R-parity Violating Supersymmetry at IceCube. *Physics Letters B*, 762, 116–123. doi:10.1016/j.physletb.2016.08.066
- Di Noto, L., Agostini, M., Althenmueller, K., Appel, S., Bellini, G., Benziger, J., ... Zuzel, G. (2016). The high precision measurement of the ^{144}Ce activity in the SOX experiment. *Institute of Physics Conference Series*, 675, 012035. doi:10.1088/1742-6596/675/1/012035
- Di Piazza, A., Wistisen, T. N., & Uggerhøj, U. I. (2016). Investigation of classical radiation reaction with aligned crystals. *Physics Letters B*, 765, 1–5. doi:10.1016/j.physletb.2016.10.083
- Ding, T., Ott, C. R., Kaldun, A., Blättermann, A., Meyer, K., Stooß, V., ... Pfeifer, T. (2016). Time-resolved four-wave-mixing spectroscopy for inner-valence transitions. *Optics Letters*, 41(4), 709–712. doi:10.1364/OL.41.000709
- Driver, S. P., Wright, A. H., Andrews, S. K., Davies, L. J., Kafle, P. R., Lange, R., ... Williams, R. (2016). Galaxy And Mass Assembly (GAMA): Panchromatic Data Release (far-UV-far-IR) and the low- z energy budget. *Monthly Notices of the Royal Astronomical Society*, 455(4), 3911–3942. doi:10.1093/mnras/stv2505
- Duerr, M., Fileviez Pérez, P., & Smirnov, J. (2016). Gamma-Ray Excess and the Minimal Dark Matter Model. *Journal of High Energy Physics : JHEP*, 2016(06), 008. doi:10.1007/JHEP06(2016)008
- Duerr, M., Vivier, M., Agostini, M., Altenmüller, K., Appel, S., Bellini, G., ... Zuzel, G. (2016). The ^{144}Ce source for SOX. *Institute of Physics Conference Series*, 675, 012032. doi:10.1088/1742-6596/675/1/012032
- Dürr, M., Fileviez Pérez, P., & Smirnov, J. (2016). Gamma Lines from Majorana Dark Matter. *Physical Review D*, 93(02), 023509. doi:10.1103/PhysRevD.93.023509
- Dürr, M., Fileviez Pérez, P., & Smirnov, J. (2016). Scalar Dark Matter: Direct vs. Indirect Detection. *Journal*

of High Energy Physics : JHEP, 2016(06), 152. doi:10.1007/JHEP06(2016)152

Eger, P., Laffon, H., Bordas Coma, P., de Ona Whilhelmi, E., Hinton, J., & Puehlhofer, G. (2016). Discovery of a variable X-ray counterpart to HESS J1832-093: a new gamma-ray binary? *Monthly Notices of the Royal Astronomical Society*, 457(2), 1753–1758. doi:10.1093/mnras/stw125

Evslin, J., Ge, S.-F., & Hagiwara, K. (2016). The leptonic CP phase from T2(H)K and mu⁺ decay at rest. *Journal of High Energy Physics : JHEP*, 2016(2), 137. doi:10.1007/JHEP02(2016)137

Fileviez Pérez, P., Murgui Galvez, C., & Ohmer, S. (2016). Simple Left-Right Theory: Lepton Number Violation at the LHC. *Physical Review D*, 94(05), 051701(R). doi:10.1103/PhysRevD.94.051701

Filianin, P., Schmidt, S., Blaum, K., Block, M., Eliseev, S., Giacoppo, F., ... Takahashi, K. (2016). The decay energy of the pure s-process nuclide ¹²³Te. *Physics Letters B*, 758, 407–411. doi:10.1016/j.physletb.2016.04.059

Fischer, A., Gärttner, M., Cörlin, P., Sperl, A. G., Schönwald, M., Mizuno, T., ... Moshammer, R. (2016). Molecular wave-packet dynamics on laser-controlled transition states. *Physical Review A*, 93(1), 012507. doi:10.1103/PhysRevA.93.012507

Fotopoulou, S., Pacaud, F., Paltani, S., Ranalli, P., Ramos-Caja, M. E., Faccioli, L., ... Willis, J. (2016). The XXL Survey: VI. The 1000 brightest X-ray point sources. *Astronomy and Astrophysics*, 592, A5. doi:10.1051/0004-6361/201527402

Fray, N., Bardyn, A., Cottin, H., Altwegg, K., Baklouti, D., Briois, C., ... Hilchenbach, M. (2016). High-molecular-weight organic matter in the particles of comet 67P/Churyumov-Gerasimenko. *Nature*, 538(7623), 72–74. doi:10.1038/nature19320

Fulle, M., Marzari, F., Della Corte, V., Fornasier, S., Sierks, H., Rotundi, A., ... Zarnecki, J. C. (2016). Evolution of the Dust Size Distribution of Comet 67P/Churyumov–Gerasimenko from 2.2 au to Perihelio. *Astrophysical Journal*, 821(1), 19. doi:10.3847/0004-637X/821/1/19

Gamer, L., Schulz, D., Enss, C., Fleischmann, A., Gastaldo, L., Kempf, S., ... Wolf, A. (2016). MOCCA: A 4k-Pixel Molecule Camera for the Position- and Energy-Resolving Detection of Neutral Molecule Fragments at CSR. *Journal of Low Temperature Physics*, 184(3-4), 839–844. doi:10.1007/s10909-015-1453-0

Garcia Ruiz, R. F., Bissell, M. L., Blaum, K., Ekström, A., Frömmgen, N., Hagen, G., ... Yordanov, D. T. (2016). Unexpectedly large charge radii of neutron-rich calcium isotopes. *Nature Physics, advanced online publ.*, 1–6. doi:10.1038/NPHYS3645

Ge, S.-F., He, H.-J., Ren, J., & Xianyu, Z.-Z. (2016). Realizing dark matter and Higgs inflation in light of LHC diphoton excess. *Physics Letters B*, 757, 480–492. doi:10.1016/j.physletb.2016.04.008

Ghanbari-Adivi, E., Fischer, D., Ferreira , N., Goullon, J., Hubele, R., LaForge, A., ... Madison, D. (2016). Comparison of experimental and theoretical fully differential cross sections for single ionization of the 2s and 2p states of Li by O8+ ions. *Physical Review A*, 94(2), 022715. doi:10.1103/PhysRevA.94.022715

Gorkhover, T., Schorb, S., Coffee, R., Adolph, M., Foucar, L., Rupp, D., ... Bostedt, C. (2016). Femtosecond and nanometre visualization of structural dynamics in superheated nanoparticles. *Nature Photonics*, 10(2), 93–97. doi:10.1038/NPHOTON.2015.264

Grund, J., Düllmann, C. E., Eberhardt, K., Nagy, S., van der Laar , J. J. W., Renisch, D., & Schneider, F. (2016). Implementation of an aerodynamic lens for TRIGA-SPEC. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 376, 225–228. doi:10.1016/j.nimb.2015.12.017

Gunst, J., Keitel, C. H., & Pálffy, A. (2016). Logical operations with single x-ray photons via dynamically-controlled nuclear resonances. *Scientific Reports*, 6, 25136. doi:10.1038/srep25136

Hahn, M., Becker, A., Bernhardt, D., Grieser, M., Krantz, C., Lestinsky, M., ... Savin, D. W. (2016). Storage ring cross section measurements for electron impact ionization of Fe⁸⁺. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 49(8), 084006. doi:10.1088/0953-4075/49/8/084006

Hantke, M. F., Hasse, D., Ekeberg, T., John, K., Svenda, M., Loh, D., ... Maia, F. R. N. C. (2016). A data set from flash X-ray imaging of carboxysomes. *Scientific Data*, 3, 160061. doi:10.1038/sdata.2016.61

Hassel, C., Blaum, K., Goodacre, T. D., Dorrer, H., Düllmann, C. E., Eberhardt, K., ... Zuber, K. (2016). Recent Results for the ECHo Experiment. *Journal of Low Temperature Physics*, 184(3), 910–921. doi:10.1007/s10909-016-1541-9

He, H.-N., Kusenko, A., Nagataki, S., Zhang, B.-B., Yang, R., & Fan, Y.-Z. (2016). Monte Carlo Bayesian search for the plausible source of the Telescope Array hotspot. *Physical Review D*, 93(4), 043011. doi:10.1103/PhysRevD.93.043011

Heylen, H., Babcock, C., Beerwerth, R., Billowes, J., Bissell, M. L., Blaum, K., ... Yordanov, D. T. (2016). Changes in nuclear structure along the Mn isotopic chain studied via charge radii. *Physical Review C*, 94(5), 054321. doi:10.1103/PhysRevC.94.054321

Hilchenbach, M., Kissel, J., Langevin, Y., Briois, C., von Hoerner, H., Koch, A., ... Zaprudin, B. (2016). Comet 67P/Churyumov–Gerasimenko: Close-up on Dust Particle Fragments. *Astrophysical Journal, Letters*, 816(2), L32. doi:10.3847/2041-8205/816/2/L32

Hoferichter, M., Klos, P., Menendez, J., & Schwenk, A. (2016). Analysis strategies for general spin-independent WIMP-nucleus scattering. *Physical Review D*, 94(6), 063505. doi:10.1103/PhysRevD.94.063505

Ibarra, A., Yaguna Toro, C. E., & Zapata, O. (2016). Direct detection of fermion dark matter in the radiative seesaw model. *Physical Review D*, 93(03), 035012. doi:10.1103/PhysRevD.93.035012

Illg, C., Haag, M., Teeny, N., Wirth, J., & Fähnle, M. (2016). Physical and mathematical justification of the numerical Brillouin zone integration of the Boltzmann rate equation by Gaussian smearing. *Journal of Theoretical and Applied Physics*, 10(1), 1–6. doi:10.1007/s40094-015-0193-5

Jones, C. F., Bernando, C., Tanyag, R. M. P., Bacellar, C., Ferguson, K. R., Gomez, L. F., ... Vilesov, A. F. (2016). Coupled motion of Xe clusters and quantum vortices in He nanodroplets. *Physical Review B*, 93(18), 180510(R). doi:10.1103/PhysRevB.93.180510

Kaldun, A., Blättermann, A., Stooß, V., Donsa, S., Wei, H., Pazourek, R., ... Pfeifer, T. (2016). Observing the ultrafast buildup of a Fano resonance in the time domain. *Science*, 354(6313), 738–741. doi:10.1126/science.aah6972

Karhu, J., Nauta, J., Vainio, M., Metsala, M., Hoekstra, S., & Halonen, L. (2016). Double resonant absorption measurement of acetylene symmetric vibrational states probed with cavity ring down spectroscopy. *The Journal of Chemical Physics*, 144(24), 244201. doi:10.1063/1.4954159

Kersten, J., & Smirnov, A. (2016). Decoherence and oscillations of supernova neutrinos. *European Physical Journal C*, 76(5), 339. doi:10.1140/epjc/s10052-016-4187-5

Kirk, J. G. (2016). Radiative trapping in intense laser beams. *Plasma Physics and Controlled Fusion*, 58(8), 085005. doi:10.1088/0741-3335/58/8/085005

Klaiber, M., & Briggs, J. S. (2016). Crossover from tunneling to multiphoton ionization of atoms. *Physical Review A*, 94(05), 053405. doi:10.1103/PhysRevA.94.053405

Klawitter, R., Bader, A., Brodeur, M., Chowdhury, U., Chaudhuri, A., Fallis, J., ... Dilling, J. (2016). Mass measurements of neutron-rich Rb and Sr isotopes. *Physical Review C*, 93(4), 045807. doi:10.1103/PhysRevC.93.045807

Köhler, F., Blaum, K., Block, M., Chenmarev, S., Eliseev, S., Glazov, D. A., ... Werth, G. (2016). Isotope dependence of the Zeeman effect in lithium-like calcium. *Nature Communications*, 7, 10246. doi:10.1038/

- Kong, X., & Pálffy, A. (2016). Stopping Narrow-Band X-Ray Pulses in Nuclear Media. *Physical Review Letters*, 116(19), 197402. doi:10.1103/PhysRevLett.116.197402
- Kübel, M., Burger, C., Kling, N. G., Pischke, T., Beaufore, L., Ben-Itzhak, I., ... Bergues, B. (2016). Complete characterization of single-cycle double ionization of argon from the nonsequential to the sequential ionization regime. *Physical Review A*, 93(5), 053422. doi:10.1103/PhysRevA.93.053422
- Kübel, M., Siemering, R., Burger, C., Kling, N. G., Li, H., Alnaser, A. S., ... Kling, M. F. (2016). Steering Proton Migration in Hydrocarbons Using Intense Few-Cycle Laser Fields. *Physical Review Letters*, 116(19), 193001. doi:10.1103/PhysRevLett.116.193001
- Kusoglu, A., Georgiev, G., Soty, C., Balabanski, D. L., Goasduff, A., Ishii, Y., ... Yoshida, N. (2016). Magnetic moment of the $13/2^+$ isomeric state in ^{69}Cu Spin alignment in the one-nucleon removal reaction. *Physical Review C*, 93(5), 054313. doi:10.1103/PhysRevC.93.054313
- LaForge, A. C., Regina, D., Jabbari, G., Gokhberg, K., Kryzhevci, N. V., Krishnan, S. R., ... Mudrich, M. (2016). Fano resonances observed in helium nanodroplets. *Physical Review A*, 93(5), 050502(R). doi:10.1103/PhysRevA.93.050502
- LaForge, A. C., Stumpf, V., Gokhberg, K., von Vangerow, J., Stienkemeier, F., Kryzhevci, N. V., ... Mudrich, M. (2016). Enhanced Ionization of Embedded Clusters by Electron-Transfer-Mediated Decay in Helium Nanodroplets. *Physical Review Letters*, 116, 203001. doi:<http://dx.doi.org/10.1103/PhysRevLett.116.203001>
- Lang, R. F., Brown, A., Brown, E., Cervantes, M., Macmullin, S., Masson, D., ... Simgen, H. (2016). A ^{220}Rn source for the calibration of low-background experiments. *Journal of Instrumentation*, 11, P04004. doi:10.1088/1748-0221/11/04/P04004
- Lange, R., Moffett, A. J., Driver, S. P., Robotham, A. S. G., Lagos, C. del P., Kelvin, L. S., ... Wright, A. H. (2016). Galaxy And Mass Assembly (GAMA): $M^*-\text{R}_\text{e}$ relations of $z=0$ bulges, discs and spheroids. *Monthly Notices of the Royal Astronomical Society*, 462, 1470–1500. doi:10.1093/mnras/stw1495
- Lavoie, S., Willis, J. P., Democles, J., Eckert, D., Gastaldello, F., Smith, G. P., ... Tuffs, R. J. (2016). The XXL survey XV: Evidence for dry merger driven BCG growth in XXL-100-GC X-ray clusters. *Monthly Notices of the Royal Astronomical Society*, 462, 4141–4156. doi:10.1093/mnras/stw1906
- Lestinsky, M., Andrianov, V., Aurand, B., Bagnoud, V., Bernhardt, D., Beyer, H., ... for the CYRING@ESR Research Community. (2016). Physics book: CYRING@ESR. *The European Physical Journal Special Topics*, 225(5), 797–882. doi:10.1140/epjst/e2016-02643-6
- Li, J.-X., Salamin, Y., Hatsagortsyan, K. Z., & Keitel, C. H. (2016). Fields of an ultrashort tightly focused laser pulse. *Journal of the Optical Society of America B-Optical Physics*, 33(3), 405–411. doi:10.1364/JOSAB.33.000405
- Liao, W.-T., Keitel, C. H., & Pálffy, A. (2016). X-ray-generated heralded macroscopical quantum entanglement of two nuclear ensembles. *Scientific Reports*, 6, 33361. doi:10.1038/srep33361
- Lindner, M., Rodejohann, W., & Xu, X. (2016). Sterile neutrinos in the light of IceCube. *Journal of High Energy Physics : JHEP*, 2016(1), 124. doi:10.1007/JHEP01(2016)124
- Lindner, M., Patel, H., & Radovcic, B. (2016). Electroweak Absolute, Meta-, and Thermal Stability in Neutrino Mass Models. *Physical Review D*, 93(07), 073005. doi:10.1103/PhysRevD.93.073005
- Lindner, M., Queiroz, F., & Rodejohann, W. (2016). Dilepton bounds on left-right symmetry at the LHC run II and neutrinoless double beta decay. *Physics Letters B*, 762, 190–195. doi:10.1016/j.physletb.2016.08.068
- Liu, J.-C., Berrah, N., Cederbaum, L. S., Cryan, J. P., Glownia, J. M., Schafer, K. J., & Buth, C. (2016). Rate equations for nitrogen molecules in ultrashort and intense x-ray pulses. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 49(7), 075602. doi:10.1088/0953-4075/49/7/075602

- Liu, R., Taylor, A. M., Wang, X.-Y., & Aharonian, F. A. (2016). Indication of a local fog of subankle ultrahigh energy cosmic rays. *Physical Review D*, 94(4), 043008. doi:10.1103/PhysRevD.94.043008
- Longo, P., Keitel, C. H., & Evers, J. (2016). Tailoring superradiance to design artificial quantum systems. *Scientific Reports*, 6, 23628. doi:10.1038/srep23628
- Lopez Coto, R., Mazin, D., Paoletti, R., Blanch Bigas, O., & Cortina, J. (2016). The Topo-trigger: a new concept of stereo trigger system for imaging atmospheric Cherenkov telescopes. *Journal of Instrumentation*, 11, P04005. doi:10.1088/1748-0221/11/04/P04005
- Ludl, P. O., & Rodejohann, W. (2016). Direct Neutrino Mass Experiments and Exotic Charged Current Interactions. *Journal of High Energy Physics : JHEP*, 2016(6), 040. doi:10.1007/JHEP06(2016)040
- Lv Q. Z., Bauke, H., Su, Q., Keitel, C. H., & Grobe, R. (2016). Bosonic pair creation and the Schiff-Snyder-Weinberg effect. *Physical Review A*, 93(1), 012119. doi:10.1103/PhysRevA.93.012119
- Maltoni, M., & Smirnov, A. Y. (2016). Solar neutrinos and neutrino physics. *European Physical Journal A*, 52(4), 87. doi:10.1140/epja/i2016-16087-0
- Mambrini, Y., Profumo, S., & Queiroz, F. (2016). Dark matter and global symmetries. *Physics Letters B*, 760, 807–815. doi:10.1016/j.physletb.2016.07.076
- Mei, B., Xu, H. S., Zhang, Y. H., Wang, M., Tu, X. L., Schmidt, K.-H., ... Zhan, W. L. (2016). Odd-even staggering in yields of neutron-deficient nuclei produced by projectile fragmentation. *Physical Review C*, 94(04), 044615. doi:10.1103/PhysRevC.94.044615
- Meisel, Z., George, S., Ahn, S., Bazin, D., Brown, B. A., Browne, J., ... Zegers, R. G. T. (2016). Time-of-flight mass measurements of neutron-rich chromium isotopes up to N=40 and implications for the accreted neutron star crust. *Physical Review C*, 93(3), 035805. doi:10.1103/PhysRevC.93.035805
- Merle, A., Platscher, M., Rojas, N., Valle, J. W. F., & Vicente, A. (2016). Consistency of WIMP Dark Matter as radiative neutrino mass messenger. *Journal of High Energy Physics : JHEP*, 2016(7), 013. doi:10.1007/JHEP07(2016)013
- Meuren, S., Keitel, C. H., & Di Piazza, A. (2016). Semiclassical picture for electron-positron photoproduction in strong laser fields. *Physical Review D*, 93(8), 085028. doi:10.1103/PhysRevD.93.085028
- Meyer, K., Müller, N., Liu, Z., & Pfeifer, T. (2016). Temporal resolution beyond the average pulse duration in shaped noisy-pulse transient absorption spectroscopy . *Applied Optics*, 55(36), 10318–10322. doi:10.1364/AO.55.010318
- Minaya, E., Alfaurt, P., Aouadi, M., Ascher, P., Blank, B., Blaum, K., ... Thomas, J.-C. (2016). Conception of PIPERADE: A high-capacity Penning-trap mass separator for high isobaric contamination at DESIR. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 376, 298–301. doi:10.1016/j.nimb.2016.01.044
- Mitchell, A., Parsons, R. D., Hofmann, W., & Bernlöhr, K. (2016). Cross calibration of telescope optical throughput efficiencies using reconstructed shower energies for the Cherenkov Telescope Array. *Astroparticle Physics*, 75, 1–7. doi:10.1016/j.astropartphys.2015.10.008
- Nagahama, H., Schneider Georg, G., Mooser, A., Smorra, C., Sellner, S., Harrington, J., ... Ulmer, S. (2016). Highly sensitive superconducting circuits at \sim 700 kHz with tunable quality factors for image-current detection of single trapped antiprotons. *Review of Scientific Instruments*, 87(11), 113305. doi:10.1063/1.4967493
- Najafi, M. A., Dillmann, I., Bosch, F., Faestermann, T., Gao, B. S., Gernhäuser, R., ... Weick, H. (2016). CsI–Silicon Particle detector for Heavy ions Orbiting in Storage rings (CsISiPHOS). *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 836, 1–6. doi:10.1016/j.nima.2016.08.040

- O'Connor, A., Becker, A., Blaum, K., Breitenfeldt, C., George, S., Göck, J., ... Wolf, A. (2016). Photodissociation of an internally cold beam of CH⁺ ions in a cryogenic storage ring. *Physical Review Letters*, 116(11), 113002. doi:10.1103/PhysRevLett.116.113002
- Okumura, A., Nodad, K., & Rultene, C. (2016). ROBAST: Development of a ROOT-based ray-tracing library for cosmic-ray telescopes and its applications in the Cherenkov Telescope Array. *Astroparticle Physics*, 76, 38–47.
- Oreshkina, N., Cavalletto, S., Keitel, C. H., & Harman, Z. (2016). X-ray fluorescence spectrum of highly charged Fe ions driven by strong free-electron-laser fields. *Journal of Physics B: Atomic, Molecular and Optical Physics*, 49(9), 094003. doi:10.1088/0953-4075/49/9/094003
- Osmanov, Z., & Rieger, F. M. (2016). Pulsed VHE emission from the Crab Pulsar in the context of magnetocentrifugal particle acceleration. *Monthly Notices of the Royal Astronomical Society: Letters*, in press. Retrieved from <http://hdl.handle.net/11858/00-001M-0000-002B-B0A6-8>
- Pacaud, F., Clerc, N., Giles, P. A., Adamo, C., Sadibekova, T., Pierre, M., ... Ziparo, F. (2016). The XXL Survey. II. The bright cluster sample: catalogue and luminosity function. *Astronomy and Astrophysics*, 592, A2. doi:10.1051/0004-6361/201526891
- Paetzold, M., Andert, T., Hahn, M., Asmar, S. W., Barriot, J.-P., Bird, M. K., ... Scholten, F. (2016). A homogeneous nucleus for comet 67P/Churyumov-Gerasimenko from its gravity field. *Nature*, 530(7588), 63–65. doi:10.1038/nature16535
- Pálffy, A., & Gunst, J. (2016). X-ray quantum-eraser setup for time-energy complementarity. *Physical Review A*, 94(06), 063849. doi:10.1103/PhysRevA.94.063849
- Papenbrock, T., & Weidenmüller, H. A. (2016). Effective field theory for deformed atomic nuclei. *Physica Scripta*, 91(5), 053004. doi:10.1088/0031-8949/91/5/053004
- Patra, S., Queiroz, F., & Rodejohann, W. (2016). Stringent Dilepton Bounds on Left-Right Models using LHC data. *Physics Letters B*, 752, 186–190. doi:10.1016/j.physletb.2015.11.009
- Patra, S., Rodejohann, W., & Yaguna, C. E. (2016). A new B-L model without right-handed neutrinos. *Journal of High Energy Physics : JHEP*, 2016(09), 076. doi:10.1007/JHEP09(2016)076
- Pavan, L., Puehlhofer, G., Bordas Coma, P., Audard, M., Balbo, M., Bozzo, E., ... Walter, R. (2016). Closer view of the IGR J11014-6103 outflows. *Astrophysics & Astronomy*, 591, A91. doi:10.1051/0004-6361/201527703
- Peng, F.-K., Wang, X.-Y., Liu, R., Tang, Q.-W., & Wang, J.-F. (2016). First Detection of GeV Emission from an Ultraluminous Infrared Galaxy: Arp 220 as Seen with the Fermi Large Area Telescope. *Astrophysical Journal, Letters*, 821(2), L20. doi:10.3847/2041-8205/821/2/L20
- Prince, K. C., Allaria, E., Callegari, C., Cucini, R., De Ninno, G., Di Mitri, S., ... Meyer, M. (2016). Coherent control with a short-wavelength free-electron laser. *Nature Photonics*, 10(3), 176–179. doi:10.1038/NPHOTON.2016.13
- Profumo , S., Queiroz, F., & Yaguna, C. E. (2016). Extending Fermi-LAT and HESS limits on gamma-ray lines from dark matter annihilation. *Monthly Notices of the Royal Astronomical Society*, 461(4), 3976–3981. doi:10.1093/mnras/stw1600
- Prosekin, A., Kelner, S. R., & Aharonian, F. A. (2016). Polarization of radiation of electrons in highly turbulent magnetic fields. *Physical Review D*, 94(6), 063010. doi:10.1103/PhysRevD.94.063010
- Pullen, M. G., Wolter, B., Le, A.-T., Baudisch, M., Sclafani, M., Pires, H., ... Biegert, J. (2016). Influence of orbital symmetry on diffraction imaging with rescattering electron wave packets. *Nature Communications*, 7, 11922. doi:10.1038/ncomms11922
- Purohit, G., Singh, P., Dorn, A., Ren, X., & Patidar, V. (2016). Triple differential cross section for the near

threshold single ionization of helium atoms for equal energy sharing. *Journal of Electron Spectroscopy and Related Phenomena*, 209, 40–45. doi:10.1016/j.elspec.2016.03.007

Queiroz, F., Yaguna Toro, C. E., & Weniger , C. (2016). Gamma-ray Limits on Neutrino Lines. *Journal of Cosmology and Astroparticle Physics*, 2016(05), 050. doi:10.1088/1475-7516/2016/05/050

Queiroz, F. (2016). Comment on “Polarized window for left-right symmetry and a right-handed neutrino at the Large Hadron-Electron Collider.” *Physical Review D*, 93(11), 118701. doi:10.1103/PhysRevD.93.118701

Queiroz, F., Siqueira, C., & Valle, J. W. F. (2016). Constraining Flavor Changing Interactions from LHC Run-2 Dilepton Bounds with Vector Mediators. *Physics Letters B*, *in Press*. doi:10.1016/j.physletb.2016.10.057

Queiroz, F. S., & Yaguna Toro, C. E. (2016). The CTA aims at the Inert Doublet Model. *Journal of Cosmology and Astroparticle Physics*, 2016(02), 038. doi:10.1088/1475-7516/2016/02/038

Ranucci, G., Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., ... Zuzel, G. (2016). Overview and accomplishments of the Borexino experiment. *Journal of Physics: Conference Series*, 675, 012036. doi:10.1088/1742-6596/675/1/012036

Ren, X., Jabbour Al Maalouf, E., Dorn, A., & Denifl, S. (2016). Direct evidence of two interatomic relaxation mechanisms in argon dimers ionized by electron impact. *Nature Communications*, 7, 11093. doi:10.1038/ncomms11093

Rescigno, T. N., Trevisan, C. S., Orel, A. E., Slaughter, D. S., Adaniya, H., Belkacem, A., ... McCurdy, C. W. (2016). Dynamics of dissociative electron attachment to ammonia. *Physical Review A*, 93(5), 052704. doi:10.1103/PhysRevA.93.052704

Rieger, F. M., & Duffy, P. (2016). Shear Acceleration in Expanding Outflows. *Astrophysical Journal*, *in press*.

Rodejohann, W., & Xu, X. (2016). A left-right symmetric flavor symmetry model. *The European Physical Journal C: Particles and Fields*, 76(3), 138. doi:10.1140/epjc/s10052-016-3992-1

Roncin, R., Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., ... Zuzel, G. (2016). Geo-neutrino results with Borexino. *Journal of Physics: Conference Series*, 675, 012029. doi:10.1088/1742-6596/675/1/012029

Rulten, C., Zech, A., Okumura, A., Laporte, P., & Schmoll, J. (2016). Simulating the optical performance of a small-sized telescope with secondary optics for the Cherenkov Telescope Array. *Astroparticle Physics*, 82, 36–48. doi:10.1016/j.astropartphys.2016.05.002

Salathe, M., & Kihm, T. (2016). Optimized digital filtering techniques for radiation detection with HPGe detectors. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 808, 150–155. doi:10.1016/j.nima.2015.11.051

Schlatholter, T., Reitsma, G., Egorov, D., Gonzalez-Magana, O., Bari, S., Boschman, L., ... Hoekstra , R. (2016). Multiple Ionization of Free Ubiquitin Molecular Ions in Extreme Ultraviolet Free-Electron Laser Pulses. *Angewandte Chemie International Edition in English*, 55(36), 10741–10745. doi:10.1002/anie.201605335

Shah, C., Amaro, P., Steinbrügge, R. F., Beilmann, C., Bernitt, S., Fritzsch, S., ... Tashenov, S. (2016). Strong higher-order resonant contributions to x-ray line polarization in hot plasmas. *Physical Review E*, 93(6), 061201(R). doi:10.1103/PhysRevE.93.061201

Shah, C., Dobrodey, S., Bernitt, S., Steinbrügge, R. F., Crespo López-Urrutia, J. R., Gu, L., & Kaastra, J. (2016). Laboratory measurements compellingly support a charge-exchange mechanism for the “dark matter” ~3.5 keV X-ray line. *The Astronomical Journal*, 833(1), 52. doi:10.3847/1538-4357/833/1/52

Shuai, P., Xu, X., Zhang, Y. H., Xu, H. S., Litvinov, Y. A., Wang, M., ... Zeng, Q. (2016). An improvement of isochronous mass spectrometry: Velocity measurements using two time-of-flight detectors. *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 376, 311–

Smirnov, O. Y., Agostini, M., Appel, S., Bellini, G., Benziger, J., Bick, D., ... Zuzel, G. (2016). Measurement of Solar pp-neutrino flux with Borexino: results and implications. *Journal of Physics: Conference Series*, 675, 012027. doi:10.1088/1742-6596/675/1/012027

Sun, X., Yang, R., McKinley, B., & Aharonian, F. (2016). Giant lobes of Centaurus A as seen in radio and gamma-ray images obtained with the Fermi-LAT and Planck satellites. *Astronomy and Astrophysics*, 595, A29. doi:10.1051/0004-6361/201629069

Takahashi, K., Blaum, K., & Novikov, Y. (2016). Synthesis of the S-only $^{122,123,124}\text{Te}$ Isotopes and the Selective Depletion of ^{123}Te by Electron Capture Process in Massive Stars. *The Astrophysical Journal*, 819(2), 118. doi:10.3847/0004-637X/819/2/118

Teeney, N., Yakaboylu, E., Bauke, H., & Keitel, C. H. (2016). Ionization Time and Exit Momentum in Strong-Field Tunnel Ionization. *Physical Review Letters*, 116(6), 063003. doi:10.1103/PhysRevLett.116.063003

Teeney, N., Keitel, C. H., & Bauke, H. (2016). Virtual-detector approach to tunnel ionization and tunneling times. *Physical Review A*, 94(2), 022104. doi:10.1103/PhysRevA.94.022104

Turcu, I. C. E., Negoita, F., Jaroszynski, D. A., McKenna, P., Balascuta, S., Ursescu, D., ... Zamfir, N. V. (2016). High Field Physics and QED Experiments at ELI-NP. *Romanian Reports in Physics*, 68(Supplement), S145–S231.

Villalba-Chávez, S., Meuren, S., & Müller, C. (2016). Minicharged particles search by strong laser pulse-induced vacuum polarization effects. *Physics Letters B*, 763, 445–453. doi:10.1016/j.physletb.2016.10.068

Voisin, F., Rowell, G., Burton, M. G., Walsh, A., Fukui, Y., & Aharonian, F. (2016). ISM gas studies towards the TeV PWN HESS J1825-137 and northern region. *Monthly Notices of the Royal Astronomical Society*, 458(3), 2813–2835. doi:10.1093/mnras/stw473

Von Hahn, R., Becker, A., Berg, F. A., Blaum, K., Breitenfeldt, C., Fadil, H., ... Zajfman, D. (2016). The cryogenic storage ring CSR. *Review of Scientific Instruments*, 87(6), 063115. doi:10.1063/1.4953888

Wagner, V. (2016). Status of the GERDA Phase II upgrade. *AIP Conference Proceedings*, 1743, 060005. doi:10.1063/1.4953322

Wang, L., Norberg, P., Gunawardhana, M. L. P., Heinis, S., Baldry, I. K., Bland-Hawthorn, J., ... van der Werf, P. (2016). GAMA/H-ATLAS: common star formation rate indicators and their dependence on galaxy physical parameters. *Monthly Notices of the Royal Astronomical Society*, 461(2), 1898–1916. doi:10.1093/mnras/stw1450

Wang, X.-Y., & Liu, R. (2016). Tidal disruption jets of supermassive black holes as hidden sources of cosmic rays: Explaining the IceCube TeV-PeV neutrinos. *Physical Review D*, 93(8), 083005. doi:10.1103/PhysRevD.93.083005

Wang, Z.-Y., Liu, R., & Wang, X.-Y. (2016). Testing the Equivalence Principle and Lorentz Invariance with PeV Neutrinos from Blazar Flares. *Physical Review Letters*, 116(15), 151101. doi:10.1103/PhysRevLett.116.151101

Wen, M., Bauke, H., & Keitel, C. H. (2016). Identifying the Stern-Gerlach force of classical electron dynamics. *Scientific Reports*, 6, 31624. doi:10.1038/srep31624

Windberger, A., Torretti, F., Borschevsky, A., Ryabtsev, A., Dobrodey, S., Bekker, H., ... Versolato, O. O. (2016). Analysis of the fine structure of Sn^{11+} - Sn^{14+} ions by optical spectroscopy in an electron-beam ion trap. *Physical Review A*, 94(1), 012506. doi:10.1103/PhysRevA.94.012506

Wolf, R., Atanasov, D., Blaum, K., Kreim, S. W., Lunney, D., Manea, V., ... Zuber, K. (2016). Background-free beta-decay half-life measurements by in-trap decay and high-resolution MR-ToF mass analysis. *Nuclear*

Wöllert, A., Bauke, H., & Keitel, C. H. (2016). Multi-pair states in electron-positron pair creation. *Physics Letters B*, 760, 552–557. doi:10.1016/j.physletb.2016.07.037

Wolter, B., Pullen, M. G., Le, A.-T., Baudisch, M., Doblhoff-Dier, K., Senftleben, A., ... Biegert, J. (2016). Ultrafast electron diffraction imaging of bond breaking in di-ionized acetylene. *Science*, 354(6310), 308–312. doi:10.1126/science.aah3429

Wright, A. H., Robotham, A. S. G., Bourne, N., Driver, S. P., Dunne, L., Maddox, S. J., ... Wilkins, S. M. (2016). Galaxy And Mass Assembly: accurate panchromatic photometry from optical priors using lambda. *Monthly Notices of the Royal Astronomical Society*, 460(1), 765–801. doi:10.1093/mnras/stw832

Xu, X., Zhang, P., Shuai, P., Chen, R. J., Yan, X. L., Zhang, Y. H., ... Xu, F. R. (2016). Identification of the Lowest T = 2, J^π = 0⁺ Isobaric Analog State in ⁵²Co and Its Impact on the Understanding of β-Decay Properties of ⁵²Ni. *Physical Review Letters*, 117(18), 182503. doi:10.1103/PhysRevLett.117.182503

Yan, X. L., Blaum, K., Litvinov, Y. A., Tu, X. L., Xu, H. S., Zhang, Y. H., & Zhou, X. H. (2016). Recent results on mass measurements of exotic nuclides in storage rings. *Institute of Physics Conference Series*, 665(Conf. 1), 012053. doi:10.1088/1742-6596/665/1/012053

Yang, R., & Aharonian, F. A. (2016). On the GeV excess in the diffuse gamma-ray emission towards the Galactic centre. *Astrophysics & Astronomy*, 589, A117. doi:10.1051/0004-6361/201527550

Yang, R., Aharonian, F., & Evoli, C. (2016). Radial distribution of the diffuse gamma-ray emissivity in the Galactic disk. *Physical Review D*, 93(12), 123007. doi:10.1103/PhysRevD.93.123007

Yang, X. F., Wraith, C., Xie, L., Babcock, C., Billowes, J., Bissell, M. L., ... Yordanov, D. T. (2016). Isomer Shift and Magnetic Moment of the Long-Lived 1/2⁺ Isomer in ⁷⁹₃₀Zn₄₉: Signature of Shape Coexistence near ⁷⁸Ni. *Physical Review Letters*, 116(18), 182502. doi:10.1103/PhysRevLett.116.182502

Yerokhin, V. A., Berseneva, E., Harman, Z., Tupitsyn, I. I., & Keitel, C. H. (2016). g Factor of Light Ions for an Improved Determination of the Fine-Structure Constant. *Physical Review Letters*, 116(10), 100801. doi:10.1103/PhysRevLett.116.100801

Yerokhin, V. A., Berseneva , E., Harman, Z., Tupitsyn, I. I., & Keitel, C. H. (2016). Weighted difference of g factors of light Li-like and H-like ions for an improved determination of the fine-structure constant. *Physical Review A*, 94(2), 022502. doi:10.1103/PhysRevA.94.022502

Yordanov, D. T., Balabanski, D. L., Bissell, M. L., Blaum, K., Budinčević, I., Cheal, B., ... Zhao, P. W. (2016). Simple Nuclear Structure in ^{111–129}Cd from Atomic Isomer Shifts. *Physical Review Letters*, 116(3), 032501. doi:10.1103/PhysRevLett.116.032501

Zdziarski, A. A., Malyshev, D., Wilhelm, E. de O., Pedretti, G., Yang, R., Chernyakova, M., ... Basak, R. (2016). The high-energy gamma-ray detection of G73.9+0.9, a supernova remnant interacting with a molecular cloud. *Monthly Notices of the Royal Astronomical Society*, 455(2), 1451–1458. doi:10.1093/mnras/stv2167

Zhang, L., & Evers, J. (2016). Nonlocal nonlinear response of thermal Rydberg atoms and modulational instability in an absorptive nonlinear medium. *Physical Review A*, 94(3), 033402. doi:10.1103/PhysRevA.94.033402

Zhang, Y. H., Litvinov, Y. A., Uesaka, T., & Xu, H. S. (2016). Storage ring mass spectrometry for nuclear structure and astrophysics research. *Physica Scripta*, 91(7), 073002. doi:10.1088/0031-8949/91/7/073002

Conference Papers 2016

Bonardi, A., Buanes, T., Chadwick, P., Dazzi, F., Foerster, A., Hörandel, J. R., Punch, M., & Consortium, R. M. W. f. t. C. (2016). Central Acceptance Testing for Camera Technologies for CTA. *Proceedings of Science, ICRC2015*: 928. Retrieved from <http://arxiv.org/abs/1508.06074>.

Brown, A. M., Abchiche, A., Allan, D., Amans, J. P., Armstrong, T. P., Balzer, A., Berge, D., Boisson, C., Bousquet, J.-J., Bryan, M., Buchholtz, G., Chadwick, P. M., Costantini, H., Cotter, G., Daniel, M. K., De Franco, A., De Frondat, F., Dournaux, J.-L., Dumas, D., Fasola, G., Funk, S., Gironnet, J., Graham, J. A., Greenshaw, T., Hervet, O., Hidaka, N., Hinton, J. A., Huet, J.-M., Jegouzo, I., Jogler, T., Kraus, M., Lappington, J. S., Laporte, P., Lefaucheur, J., Markoff, S., Melse, T., Mohrmann, L., Molyneux, P., Nolan, S. J., Okumura, A., Osborne, J. P., Parsons, R. D., Rosen, S., Ross, D., Rowell, G., Sato, Y., Sayede, F., Schmoll, J., Schoorlemmer, H., Servillat, M., Sol, H., Stamatescu, V., Stephan, M., Stuik, R., Sykes, J., Tajima, H., Thornhill, J., Tibaldo, L., Trichard, C., Vink, J., Watson, J. J., White, R., Yamane, N., Zech, A., Zink, A., & Zorn, J. (2016). The GCT camera for the Cherenkov Telescope Array. *Proceedings of SPIE, 9906*: 99065K. doi:10.1117/12.2231685.

Brun, F., Lemoine-Goumard, M., Marandon, V., Katsuta, J., & Jogler, T. (2016). The Fermi-LAT and H.E.S.S. views of the supernova remnant W49B. *Proceedings of Science, ICRC2015*: 866.

Giavitto, G., Ashton, T., Balzer, A., Berge, D., Brun, F., Chaminade, T., Delagnes, E., Fontaine, G., Füßling, M., Giebels, B., Glicenstein, J. F., Gräber, T., Hinton, J., Jahnke, A., Klepser, S., Kossatz, M., Kretzschmann, A., Lefranc, V., Leich, H., Lüdecke, H., Manigot, P., Marandon, V., Moulin, E., de, M., Nayman, P., Penno, M., Ross, D., Salek, D., Schade, M., Schwab, T., Simoni, R., Stegmann, C., Thornhill, J., & Toussenel, F. (2016). A major electronics upgrade for the H.E.S.S. Cherenkov telescopes 1-4. *Proceedings of Science, ICRC2015*: 996. Retrieved from <http://arxiv.org/abs/1509.01232>.

Giavitto, G., Ashton, T., Balzer, A., Berge, D., Brun, F., Chaminade, T., Delagnes, E., Fontaine, G., Füßling, M., Giebels, B., Glicenstein, J.-F., Gräber, T., Hinton, J. A., Jahnke, A., Klepser, S., Kossatz, M., Kretzschmann, A., Lefranc, V., Leich, H., Lüdecke, H., Lypova, I., Manigot, P., Marandon, V., Moulin, E., de Naurois, M., Nayman, P., Penno, M., Ross, D., Salek, D., Schade, M., Schwab, T., Simoni, R., Stegmann, C., Steppa, C., Thornhill, J., & Toussenel, F. (2016). Upgraded cameras for the HESS imaging atmospheric Cherenkov telescopes. *SPIE Proceedings, 9908*: 99082H.

Gottschall, D., Foerster, A., Bonardi, A., Santangelo, A., & Puehlhofer, a. G. (2016). The Mirror Alignment and Control System for CT5 of the H.E.S.S. *Proceedings of Science, ICRC2015*: 1017.

Hahn, J., Fernandez, D., Casanova, S., Chaves, R., Marandon, V., Renaud, M., Safi-Harb, S., & Vink, J. (2016). Study of the Very High Energy Emission from the Galactic Supernova Remnant Population with H.E.S.S. *Proceedings of Science, ICRC2015*: 860.

Komin, N., Lu, C.-C., Mayer, M., Ohm, S., Renaud, M., & Vink, J. (2016). H.E.S.S. Observations of the Large Magellanic Cloud. *Proceedings of Science, ICRC2015*: 849.

Lemiere, A., Terrier, R., Jouvin, L., Marandon, V., Khelifi, B., & collaboration, f. t. H. E. S. S. (2016). Study of the VHE diffuse emission in the central 200 pc of our Galaxy with H.E.S.S. *Proceedings of Science, (ICRC 2015)*: 838. Retrieved from <http://arxiv.org/abs/1510.04518>.

Maier, G., Arrabito, L., Bernlöhr, K., Bregeon, J., Di Pierro, F., Hassan, T., Jogler, T., Hinton, J., Moralejo, A., Wood, M., & Consortium, f. t. C. (2016). Monte Carlo Performance Studies of Candidate Sites for the Cherenkov Telescope Array. *Proceedings of Science, ICRC2015*: 713. Retrieved from <http://arxiv.org/abs/1508.06042>.

Murach, T., Gajdus, M., & Parsons, R. D. (2016). A Neural Network-Based Monoscopic Reconstruction Algorithm for H.E.S.S. II. *Proceedings of Science, ICRC2015*: 1022. Retrieved from <http://arxiv.org/abs/1509.00794>.

Puehlhofer, G., Eger, P., Sasaki, M., Gottschall, D., Capasso, M., & Collaboration, a. H. E. S. S. (2016). X-ray

observations of Galactic H.E.S.S. sources: an update. In *XMM-Newton: The Next Decade* (pp. 61).

Puehlhofer, G., Eger, P., Doroshenko, V., Cui, Y., & Collaboration, a. H. E. S. S. (2016). New constraints on the TeV SNR shells RX J1713.7-3946 and HESS J1731-347. In *Supernova Remnants: An Odyssey in Space after Stellar Death*.

Romoli, C., Bordas Coma, P., Mariaud, C., Murach, T., Aharonian, F. A., de Naurois, M., Pühlhofer, G., Schwanke, U., van Soelen, B., Sushch, I., Zabalza, V., & Collaboration, f. t. H. E. S. S. (2016). H.E.S.S. observations of PSR B1259-63 during its 2014 periastron passage. *Proceedings of Science, ICRC2015*: 873.

Schüssler, F., Bordas Coma, P., Chadwick, P. M., Dickinson, H., Ernenwein, J.-.-P., & Collaboration, f. t. H. E. S. S. (2016). Simultaneous H.E.S.S. and RXTE observations of the microquasars GRS 1915+105, Circinus X-1 and V4641 Sgr. *Proceedings of Science, ICRC2015*: 727. Smirnov, A. (2016). Neutrinos: Projecting onto the Future. *Proceedings of Science, Neutel2015*: 004.

Szczerbinska, B., Allahverdi, R., Babu, K., Balantekin, B., Dutta, B., Kamon, T., Kumar, J., Queiroz, F., Strigari, L., & Surman, R. (Eds.). (2016). *CETUP 2015: Workshop on Neutrino Physics; AIP Conference Proceedings 1743*. American Physical Soc.

Books and Book Chapters 2016

- Harney, H.-L. (2016). Bayesian Inference: Data Evaluation and Decisions. 2. ed., Heidelberg: Springer.
- Povh, B. (2016). Von den Tiefen des Alls in den Mikrokosmos: ein Streifzug durch die moderne Physik. Heidelberg: Springer.
- Ulmer, S., Blaum, K., & Quint, W. (2016). Precise Tests of Fundamental Symmetries with Trapped Ions. In: M. Knoop, N. Madsen, & R. C. Thompson (Eds.), Trapped Charged Particles: A Graduate Textbook with Problems and Solutions Advanced Textbooks in Physics (pp. 335-376). London: World Scientific Publishing Europe Ltd.

Invited Talks 2014

At Conferences and Symposia

Aachen, Germany, The 13th International Workshop on Tau Lepton Physics (TAU14) (15.09.-19.09.2014)

Maneschg, W.:

Double beta decay: present status and near future.

Alberta, Canada, Lake Louise Winter Institute 2014 (17.02.-21.02.2014)

Lindemann, S.:

Recent results from the direct Dark Matter search experiment XENON.

Amsterdam, The Netherlands, Technology and Instrumentation in Particle Physics, TIPP 2014 (02.06.-06.06.2014)

Knöpfle, K.T.:

Upgrade of the GERDA experiment.

Marrodán Undagoitia, T.:

Liquid noble gases for direct dark matter searches.

Aspen, USA, Frontiers in Particle Physics: From Dark Matter to the LHC and Beyond (18.01.-24.01.2014)

Domainko, W.:

Recent highlights from H.E.S.S.

Bad Honnef, Germany, 561th Wilhelm und Else Heraeus-Seminar "Massive Neutrinos" (22.04.-25.04.2014)

Akhmedov, E.:

Neutrino oscillations in quantum mechanics and quantum field theory.

Buck, C.:

Sterile neutrino search at nuclear reactors.

Eliseev, S.:

Penning Trap Mass Spectrometry for Neutrino Physics.

Rodejohann, W.:

Neutrino Mass: Theory Overview.

Wegmann, A. :

A liquid argon scintillation veto for the Gerda experiment.

Bad Honnef, Germany, Heraeus Workshop "strong interactions in the LHC era" (12.11.-14.11. 2014)

Lindner, M.:

Dynamical conformal and electro-weak symmetry breaking.

Bad Honnef, Germany, Physics Landscape after the Higgs Discovery at the LHC (11.2014)

Marrodán Undagoitia, T.:

Astrophysical searches for dark matter.

Bamberg, Germany, Annual Meeting of the Astronomische Gesellschaft, Splinter C: Unified Particle Transport Models in Multi-scale Astrophysical Environments: From Solar Particles and Space Weather to Galactic Cosmic Rays (22.09.-26.09.2014)

Domainko, W.:

Cosmic Ray Acceleration and Transport in the Galaxy: H.E.S.S. Observations.

Barcelona, Spain, ICCUB Christmas Meeting (17.12.-19.12.2014)

Aharonian F.A.:

Cosmic PeVatrons.

Bordas Coma, P.:

Gamma-ray emission from SS433/W50.

Bariloche, Argentina, 17th International Conferences on the Physics of Highly Charged Ions (HCI) (31.08.-05.09.2014)

Crespo López-Urrutia, J.R.:

Highly charged ions in Coulomb crystals.

Harman, Z.:

X-ray frequency comb generation via optical control of highly charged ions.

Beijing, China, ISSI-BJ workshop (01.06.-05.06.2014)

Yang R.:

Fermi bubbles and beyond.

Berlin, Germany, 78th Annual Meeting of the DPG and DPG Spring Meeting (16.03.-20.03.2014)

Bauke, H.:

Quantum systems in ultra-strong lasers: from tunnel ionization to spin dynamics (Main Talk).

Berlin, Germany, DPG-Frühjahrstagung (17.03.-21.03.2014)

Crespo López-Urrutia, J.R.:

Photoabsorption and opacity in the X-ray region: The role of highly charged ions. (Hauptvortrag)

Eliseev, S.:

PI-ICR technique for high-precision measurements of nuclide masses.

Kreckel, H.:

Imaging the Absolute Configuration of a Chiral Epoxide in the Gas Phase.

Moshammer, R.:

Time Resolved Experiments with XUV and IR Laser Pulses. (plenary talk)

von Hahn, R.:

The Cryogenic Storage Ring Project.

Berlin, Germany, OSA Research in Optical Sciences, High-Intensity Lasers and High-Field Phenomena (HILAS) (18.03.-20.03.2014)

Pfeifer, T.:

Time-domain physics in doubly-excited States and phase control of Fano resonances.

Blois, France, 26th Rencontres de Blois on "Particle Physics and Cosmology" (18.05.-23.05.2014)

Eger, P.:

HESS J1640-465 - an exceptionally luminous TeV gamma-ray supernova remnant.

Bologna, Italy, 44th International Symposium on Multiparticle Dynamics (08.12.-12.12.2014)

Blouw, J.:

Forward Physics and Diffraction at LHCb

Impact of LHCb Measurements on PDFs.

Bormio, Italy, Bormio Winter Meeting on Nuclear Physics (27.01.-31.01.2014)

Blaum, K.:

Nuclear Masses and their Importance for Nuclear Structure and Fundamental Studies.

Byurakan, Aragatsotn District, Armenia Armenia, Nor Amberd International Conference Centre of the Yerevan Physics Institute, TEPA-2014 (22.09.-26.09.2014)

Aharonian, F.A.:

Extreme Particle Accelerators.

Cambridge, Massachusetts, USA, Harvard ITAMP workshop (10.03.-12.03.2014)

Keitel, C. H.:

Quantum coherence at high energies.

Cargese, France, CORINF PhD-school (27.04.-03.05.2014)

Moshammer, R.:

Time Resolved Atomic and Molecular Dynamics in XUV and IR Laser Fields.

Chisinau, Moldova, 7th International Conference on Materials Science and Condensed Matter Physics (MSCMP 2014) (15.09.-19.09.2014)

Hatsagortsyan, K. Z.:

Under-the-barrier dynamics in laser induced relativistic tunneling: tunneling times and spin effects.

Heeg, K. P.:

Cavity QED with hard X-rays and Mößbauer nuclei.

College Station, Texas, USA, TAMU-PQE Follow-up Meeting (14.01.-15.01.2014)

Liao, W.:

Quantum Control of X-Ray.

Conca Specchiulla, Italy, Neutrino Oscillation Workshop "NOW2014" (07.09.-14.09.2014)

Akhmedov, E.:

Decoherence by wave packet separation and collective neutrino oscillations.

Rodejohann, W.:

Models for keV Neutrinos and KATRIN.

Smirnov, A. Y.:

Riddle of the Neutrino Mass.

Dallas TX, USA, Meeting of the American Chemical Society (19.03.2014)

Kreckel, H.:

Combining experimental techniques for comprehensive astrophysical case studies.

Darmstadt, Germany, ILIMA Open Meeting (04.03.2014)

Pálffy-Buß, A.:

Physics at the atomic-nuclear interface.

Darmstadt, Germany, NUSTAR Annual Meeting (03.03.-07.03.2014)

Eliseev, S.:

PI-ICR technique for high-precision measurements of nuclide masses.

Dresden, Germany, 15th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics (26.08.2014)

Kreim, S.:

Nuclear masses and neutron stars.

Dresden, Germany, International Workshop on Atomic Physics (24.11.-28.11.2014)

Ott, C.:

Control of Spectral Line Shapes using Ultrashort Laser Pulses.

Yakaboylu, E.:

Signatures of nonadiabaticity, relativity and tunneling time delays in the photoelectron momentum distribution of laser-induced tunnel-ionization.

Durham, UK, Newcastle University, Quantum, Atomic, Molecular and Plasma Physics Workshop (15.09.-18.09.2014)

Shah, C.:

Measurement of the X-ray emission anisotropies in the resonant photorecombination into highly charged ions.

East Lansing, Michigan, USA, Electron Beam Ion Sources and Traps Symposium 2014 (EBIST 2014) (18.05.-21.05.2014)

Bernitt, S.:

Electron Beam Ion Traps at Ultrabrilliant Light Sources.

Crespo López-Urrutia, J.R.:

Opportunities for nuclear physics studies using highly charged ions.

Sturm, S.:

The g-factor of Highly Charged Ions – Stress Test for the Standard Model and Access to the Atomic Mass of the Electron.

Edinburgh, Scotland, NUPPEC meeting and workshop (10.10.-11.10.2014)

Dilling, J.:

The Canadian Nuclear Physics Landscape.

Edinburgh, UK, Beauty 2014 (14.07.-18.07.2014)

Fontana, M.:

Charmless B decays: Dalitz.

Erice, Italy, International Workshop on Photoionization (IWP) (26.08.-01.09.2014)

Moshammer, R.:

Pump-Probe Experiments with Atoms and Molecules from XUV-XUV to IR-IR.

Frankfurt, Germany, 47. Jahrestagung der Deutschen Gesellschaft für Massenspektrometrie (03.03.-05.03.2014)

Wolf, R.:

First on-line applications of a multi-reflection time-of-flight mass separator at ISOLTRAP and the mass measurement of ⁸²Zn.

Frankfurt, Germany, DPG Spring Meeting (17.03.-21.03.2014)

Wolf, R.:

Faster and further, masses and more: Latest developments and results from ISOLTRAP.

Frankfurt, Germany, DPG Spring meeting, "Hadronen und Kerne" (17.03.-21.03.2014)

Wagner, V.:

Test of GERDA Phase II Detector Assembly.

Wegmann, A.:

A liquid argon scintillation veto for the GERDA experiment.

Frascati, Italy, Workshop: Rethinking Naturalness (17.12.-19.12.2014)

Lindner, M.:

Conformal and Electro-Weak Symmetry Breaking.

Freudenstadt, Germany, "Flavorful Ways to New Physics" (28.10.-31.10.2014)

Rodejohann, W.:

Lepton Flavor Theory.

Garching, Germany, Workshop at Max-Planck-Institute for Extraterrestrial Physics (15.05.2014)

Kreckel, H.:

Laboratory Astrophysics in Heidelberg.

Geneva, Switzerland, CERN, ISVECHRI 2014, Intl. Symposium on Very High Energy Cosmic Ray Interactions (18.08.-22.08.2014)

Parsons, R.D.:

Gamma-ray astronomy and Hadronic Interactions.

Geneva, Switzerland, CERN, Workshop on implications of LHCb measurements and future prospects (15.10.-17.10.2014)

Schmelling, M.:

LHCb Results from pA Collisions.

Geneva, Switzerland, CERN, Workshop on the determination of centrality in pA collisions at the LHC (14.02.2014)

Schmelling, M.:

pPb centrality determination in LHCb.

Geneva, Switzerland, ISOLDE workshop (15.12.-17.12.2014)

Dilling, J.:

Status and Highlights from ISAC and ARIEL.

Hamburg, Germany, 20th Particles & Nuclei International Conference 2014, PANIC 2014 (25.08.-28.08.2014)

Hofmann, W.:

Gamma Ray Astronomy.

Wegmann, A.:

GERDA: Phase I results & upgrade for Phase II.

Hamburg, Germany, DESY Photon Science Users Meeting (29.01.-31.01.2014)

Wolf, A.:

Fragmentation Pathways of Molecular Ions after XUV Photoionization.

Hamburg, Germany, DESY Theory Workshop 2014 (23.09.-26.09.2014)

Duerr, M.:

Dark Matter and Neutrino Masses in Gauge Theories for Baryon and Lepton Numbers.

Hamburg, Germany, DESY Workshop on AMO Science at FLASH (11.12.2014)

Moshammer, R.:

Coincidence Experiments at FLASH: Future Prospects.

Hamburg, Germany, DESY, European XFEL User Meeting (29.01.-31.01.2014)

Moshammer, R.:

Time Resolved Studies on Small Quantum Systems.

Hamburg, Germany, International Workshop for young scientists: "Perspectives of ultrafast physics - light-induced dynamics in atoms and molecules" (05.05.-06.05.2014)

Blätermann, A.:

Dissecting atoms in strong laser fields: Fano phase analysis and 2D absorption spectroscopy.

Gunst, J.:

Nuclear isomer triggering with photons and electrons at the XFEL.

Hamburg, Germany, PIER Graduate Week (06.10.-09.10.2014)

Pálffy-Buß, A.:

Nuclear x-ray quantum optics.

Hangzhou, China, 8th International West Lake Symposium on Laser-Plasma Interactions (21.04.-25.04.2014)

Kumar, N.:

Radiation-reaction-force-induced nonlinear mixing of the Raman sidebands of an ultra-intense laser pulses in plasmas.

Tamburini, M.:

Electron dynamics controlled via self-interaction.

Harbin, China, 4th East Asia School and Workshop on Laboratory, Space and Astrophysical Plasmas (27.07.-03.08.2014)

Kirk, J.G.:

Astrophysical Particle Acceleration.

Hawaii, Big Island, International Workshop on "Double Beta Decay and Underground Science" DBD2014 (05.10.-07.10.2014)

Heisel, M.:

Upgrades for GERDA Phase II.

Heidelberg, Germany, German-Japanese Colloquium "Frontiers of Laser Science, IWH Heidelberg (15.01.-17.01.2014)

Blaum, K.:

High-resolution collinear laser spectroscopy of exotic isotopes.

Pfeifer, T.:

Attosecond Control of Matter and Light –Fundamental Physics in the Time Domain.

Heidelberg, Germany, Johns Hopkins Workshop 2014: The Great Beyond: Particles and Cosmology after the Higgs Discovery (21.07.-23.07.2014)

Lindner, M.:

WIMPs: Theory and experimental results from XENON.

Heidelberg, Germany, Topical Workshop of the FLAIR Collaboration (14.05.-15.05.2014)

Krantz, C.:

The Cryogenic Storage Ring CSR: Stored and cooled ions in a 10 K environment

Kellerbauer, A.:

Ultracold antihydrogen by laser cooling of anions.

Heidelberg, Germany, Workshop on Quantum Dynamics in Physics, Chemistry and Biology (01.10.2014)

Shah, C.:

Measurement of the X-ray emission asymmetries in the resonant electron recombination into highly charged ions.

Istanbul, Turkey, Max Planck Partner Group Workshop (18.11.-20.11.2014)

Eliseev, S.:

Penning Trap Mass Spectrometry for Neutrino Physics.

Manea, V.:

A study of the nuclear shape-transition phenomenon from the mean-field perspective: recent results from the Penning-trap mass spectrometer ISOLTRAP.

Wolf, R.:

MR-TOF mass separation and measurements at ISOLTRAP, Nuclear structure studies using empirical and theoretical ground and excited state properties.

Jena, Germany, 9th International Conference on Atomic and Molecular Data and Their Applications (22.09.2014)

Kellerbauer, A.:

Optical spectroscopy of atomic anions.

Jena, Germany, X-ray workshop (24.02.-26.02.2014)

Crespo López-Urrutia, J.R.:

X-ray laser spectroscopy: A tool for fundamental and applied research.

Evers, J.:

X-ray quantum optics with Mößbauer nuclei.

Karlsruhe, Germany, Astroteilchenphysik in Deutschland – Status und Perspektiven (30.09.-01.10.2014)

Hofmann, W.:

The Cherenkov Telescope Array CTA.

Marrodán Undagoitia, T.:

Liquid noble gases for direct dark matter searches.

Rodejohann, W.:

Neutrinoeigenschaften.

Karlsruhe, Germany, General Meeting of the Helmholtz Alliance for Astroparticle Physics (29.09.2014)

Völk, H.J.:

Sind Supernovae die Quellen der Galaktischen Kosmischen Strahlung?

Karlsruhe, Germany, Post graduate course at KSETA, Karlsruhe Institute of Technology (08.04.-09.04.2014)

Voss, H.:

Multivariate Methods of Data Analysis.

Kerala, India, 20th National Conference on Atomic and Molecular Physics (09.12.-12.12.2014)

Mishra, P. M.:

Role of collective excitation in high energy radiation interaction with polycyclic aromatic hydrocarbons.

Kiel, Germany, 24th European Cosmic Ray Symposium (01.09.-05.09.2014)

Eger, P.:

Supernova Remnants and Pulsar Wind Nebulae with IACTs.

Kloster Marienburg, Germany, HGS-HIRe Lecture Week on Nuclear Structure Physics (07.07.-11.07.2014)

Blaum, K.:

Measurement and Calculation of Nuclear Masses, 3 Lectures each of 90min.

La Thuile, Italy, 49th Rencontres de Moriond / Cosmology (22.03.-29.03.2014)

Viana, A.:

Indirect dark matter searches at very-high energies with H.E.S.S.

La Thuile, Italy, Rencontres de Physique de la Vallée d'Aoste (23.03.-01.04.2014)

Volyansky, D.:

Production and spectroscopy of heavy flavours at LHCb.

Lafayette, USA, Workshop on relativistic plasma astrophysics (12.05.-14.05.2014)

Kirk, J.G.:

Relativistic, under-dense outflows.

Leiden, The Netherlands, Workshop on The Passage of Light within Spiral Galaxies (06.05.-09.05.2014)

Tuffs, R.J.:

Modelling the Passage of Light within Spiral Galaxies: a historical perspective.

Les Houches, France, Probing the Strong Interaction at A Fixed Target Experiment with the LHC beams (12.01.-17.01.2014)

Schmeling, M.:

pA Physics with LHCb and HERA-B.

Leuven, Belgium, Meeting of the Belgian Physical Society (28.05.2014)

Kreckel, H.:

Imaging the Absolute Configuration of a Chiral Epoxide in the Gas Phase.

Leuven, Belgium, Symposium on the occasion of the CERN-60, ISOLDE-50 and LISOL-40 anniversaries (21.11.2014)

Blaum, K.:

Radioactive ion beams for science and society at ISOLDE - the prominent role of Belgium researchers.

Lille, France, 46th conference of the European Group on Atomic Systems (01.07.-04.07.2014)

Shah, C.:

Measurement of the X-ray emission anisotropies in the resonant photorecombination into highly charged ions.

London, UK, Fourth Symposium on Prospects in the Physics of Discrete Symmetries (DISCRETE 2014) (02.12.-06.12.2014)

Duerr, M.:

Gauge Theories for Baryon and Lepton Numbers with Lepto-Baryons.

London, UK, 9th International Workshop on Neutrino-Nucleus Interactions in the Few GeV Region (19.05.-24.05.2014)

Lubashevskiy, A.

Results and perspectives of the GERDA experiment.

London, United Kingdom, Imperial College, Photon14 (01.09.-04.09.2014)

Pfeifer, T.:

Control of Electronic and Nuclear Resonances—Fundamental Physics in the Time Domain.

London, United Kingdom, XLIC Meeting on Ultra-Fast Electron Dynamics in Molecules (03.07.-04.07.2014)

Moshammer, R.:

Time Resolved Experiments with Atoms and Molecules.

Madison, USA, DAMOP14 Meeting of the American Physical Society (02.06.-06.06.2014)

Blaum, K.:

Fundamental tests of nature and a precision measurement of the electron mass.

Pfeifer, T.:

Understanding and Laser Control of Fano Resonances and Absorption in the Time Domain.

- Mainz, Germany, European Trapped Ion Conference ECTI 2014 (15.09.-19.09.2014)
- Crespo López-Urrutia, J.R.:**
Highly charged ions in Coulomb crystals.
- Dilling, J.:**
Precision mass measurements in Penning traps for Nuclear Physics.
- Eliseev, S.:**
PI-ICR technique for high-precision measurements of nuclide masses.
- Sturm, S.:**
The g-factor of Highly Charged Ions - Stress Test for the Standard Model and Access to Fundamental constants.
- Wolf, R.:**
ISOLTRAP's multi-reflection time-of-flight mass separator and spectrometer.
- Mainz, Germany, Frühjahrstagung der Deutschen Physikalischen Gesellschaft (24.03.-28.03.2014)
- Duerr, M.:**
Neutrino Masses and Dark Matter in Gauge Theories for Baryon and Lepton Numbers.
- Maneschg, W.:**
GERDA and the search for the neutrinoless double beta decay: first results and perspectives.
- Volyanskyy, D.:**
Forward particle production in pp and pPb collisions at the Terascale.
- Welter, J.:**
Oscillation phenomenology of gauged sterile neutrinos.
- Wolf, R.:**
First on-line applications of an MR-ToF-MS at ISOLTRAP and the mass measurement of ^{82}Zn .
- Mainz, Germany, Workshop on High precision fundamental constants at the TeV scale (10.03.-21.03.2014)
- Lindner, M.:**
Relevance of the exact top mass value for BSM ideas.
- Mainz, Germany, XIIth International Conference on Heavy Quarks & Leptons 2014 (25.08.-29.08.2014)
- Collin, A.:**
Reactor antineutrino experiments.
- Manchester, England, 22nd International Conference on Supersymmetry and Unification of Fundamental Interactions "SUSY2014" (20.07.-26.07.2014)
- Heeck, J.:**
Lepton Number Violation with Dirac Neutrinos.
- Smirnov, A. Y.:**
Neutrinos.
- Montpellier, France, 17th High-Energy Physics International Conference on Quantum Chromodynamics (30.06.-04.07.2014)
- Schmelling, M.:**
Soft QCD Measurements in the Forward Acceptance at the LHC.
- Montpellier, France, CRISM International Workshop (24.06.-27.06.2014)
- Voelk, H.J.:**
Cosmic-ray driven winds.
- Munich, Germany, MIAPP Program "Neutrinos in Astro- and Particle Physics" (30.06.-25.07.2014)
- Akhmedov, E.:**
Decoherence by wave packet separation and collective neutrino oscillations.
- Smirnov, A. Y.:**
Measuring CP violation phase with atmospheric neutrinos.
- Nizhny Novgorod, Russia, Topical Problems of Nonlinear Wave Physics (NWP-2014) (17.07.-23.07.2014)
- Tamburini, M.:**
The classical limit of radiation reaction effects in ultraintense laser fields.
- Kumar, N.:**
Effect of the radiation reaction force on the electronic parametric instabilities of a strong laser pulse in a plasma.
- Meuren, S.:**
Nonlinear QED-effects in strong laser fields.

Obergurgl, Austria, 7th HGSFP Winter School (18.01.-22.01.2014)

Ott, C.:

Time-Resolved Spectroscopy – Techniques & Applications.

Obergurgl, Austria, XIXth Symposium on Atomic, Cluster and Surface Physics (09.02.-14.02.2014)

Dorn, A.:

Novel Studies of Electron-Impact Induced Ionization of Atoms, Molecules and Clusters.

Odense, Denmark, MASS14 - workshop on the origin of mass (19.05.-22.05.2014)

Lindner, M.:

Conformal Electroweak Symmetry Breaking and implications for neutrinos and dark matter.

Okinawa, Japan, Ultrafast Phenomena (07.07.-11.07.2014)

Pfeifer, T.:

Ultrafast Laser Control of Absorption and Emission via the Fano Phase.

Oxford, UK, Dark Matter at LHC (06.09.2014)

Smirnov, J.:

Implications of Spontaneous Scale Symmetry Breaking.

Oxford, UK, Particle Physics Seminar (04.02.2014)

Smirnov, J.:

Leptophilic Dark Matter.

Padova, Italy, Sapore Gravis Workshop 2014 (09.12.-12.12.2014)

Schmelling, M.:

LHCb perspectives for fixed target physics.

Paris, France, 17th International Conference From the Planck Scale to the Electroweak Scale (Planck 2014) (26.05.-30.05.2014)

Duerr, M.:

Dark Matter and Neutrino Masses in Gauge Theories for Baryon and Lepton Numbers.

Smirnov, A. Y.:

Leptonic CP violation and see-saw.

Paris, France, 5th workshop on Air Shower Detection at High Altitude (26.05.-28.05.2014)

Hofmann, W.:

Status of CTA.

Paris, France, APC, NNN14: International Workshop on Next generation Nucleon Decay and Neutrino Detectors (04.11.-06.11.2014)

Lindner, M.:

Concluding talk on prospects.

Paris, France, International Meeting for Large Neutrino Infrastructures (22.06.-25.06.2014)

Smirnov, A. Y.:

Theory of neutrino mass and mixing.

Paris, France, IZEST ELI-NP Conference (16.09.-19.09.2014)

Di Piazza, A.:

Recollision processes in strong-field QED in the presence of an intense laser beam.

Paris, France, Magnetic Fields from the Sun to Black Holes (17.11.-19.11.2014)

Kirk, J.G.:

Particle acceleration at pulsar-wind termination shocks.

Paris, France, Planck 2014 (12.05.2014)

Smirnov, J.:

Neutrino Masses and Conformal Symmetry.

Potsdam, GermanyWorkshop "Perspectives of Astrophysics in Germany 2015-2030", Rat Deutscher Sternwarten (RDS) (09.12.2014)

Kreckel, H.:

Laboratory Astrophysics.

Protvino, Russia, XXXth International Workshop on High Energy Physics "Particle and Astroparticle Physics, Gravitation and Cosmology: Predictions, Observations and New Projects" (23.06.-27.06.2014)

Blouw, J.:

*Exclusive and Inclusive quarkonia production in the forward acceptance at the LHC.
Heavy Ion Physics at LHCb.*

Müller, S. J.:

Electroweak Processes in Laser-Boosted Lepton Collisions.

Puerto Ayora, Ecuador, IAU Symposium 313 „Extragalactic jets from every angle“ (14.09.-19.09.2014)

Kirk, J.G.:

Particle acceleration mechanisms, cosmic rays, and high-energy radiative processes.

Quy Nhom, Vietnam, 10th Rencontres du Vietnam: Very High Energy Phenomena in the Universe (03.08.-09.08.2014)

Viana, A.:

Dark matter searches with gamma-rays.

Bordas Coma, P.:

Novae and variable Galactic sources @ gamma-ray energies.

Ringberg, Kreuth, Germany, 5th Ringberg Workshop on Science with FELs - from first results to future perspectives (16.02.-19.02.2014)

Pálffy-Buš, A.:

X-rays for nuclei with the XFEL.

Rio de Janeiro, Brasil, CPEM 2014, Conference on Precision Electromagnetic Measurements (24.08.-29.08.2014)

Blaum, K.:

Precision Penning-trap mass measurements and fundamental constants.

San Francisco, California, USA, 248th American Chemical Society National Meeting (10.08.-14.08.2014)

Pálffy-Buš, A.:

Nuclear excitation with zeptosecond multi-MeV laser pulses.

Santiago de Compostela, Spain, 23rd Congress of the International Commission for Optics (ICO-23) (26.08.-29.08.2014)

Kumar, N.:

Influence of the radiation reaction force on the stimulated Raman scattering of an intense laser pulse in a plasma.

São Paulo, Brasil, III Astroparticle Physics Workshop: The Future in South America (12.11.-14.11.2014)

Hofmann, W.:

The Cherenkov Telescope Array CTA.

Shanghai, China, 13th International Conference on Multiphoton Processes (ICOMP13) (07.12.-10.12.2014)

Hatsagortsyan, K. Z.:

Under-the barrier dynamics in laser-induced tunneling: relativistic and nonadiabatic effects.

Pfeifer, T.:

Atomic and molecular bound states in short and strong fields.

Shanghai, China, 2014 Shanghai Particle Physics and Cosmology Symposium (SPCS2014) (28.05.-31.05.2014)

Lindner, M.:

Conformal Electroweak Symmetry Breaking and implications for neutrinos and dark matter.

Shanghai, China, PEARL International Workshop (03.05.2014)

Crespo López-Urrutia, J.R.:

X-ray laser spectroscopy of HCl: Testing QED with advanced light sources.

Sheffield, United Kingdom, Faraday Discussions, Emerging Photon Technologies for Chemical Dynamics (09.07.-11.07.2014)

Moshammer, R.:

Multiple Ionization and Fragmentation of I₂ Studied by IR-XUV Pump-Probe.

Singapore, Institute for Advanced Study, Flavor Physics and Mass Generation (10.02.-13.02.2014)

Lindner, M.:

Neutrinos and dark matter.

Snowbird, Utah, USA, 44th Winter colloquium on the physics of quantum electronics (05.01.-09.01.2014)

Evers, J.:

Mößbauer meets Fano for line shape control.

Liao, W.:

X-Ray Quantum Phase Control Using Nuclear Polaritons.

Sofia, Bulgaria, The 23rd annual International Laser Physics Workshop (LPHYS'14) (14.07.-18.07.2014)

Di Piazza, A.:

Electron dynamics controlled via self-interaction (Seminar 2).

Ultrarelativistic electron states in a general background electromagnetic field (Symposium).

Evers, J.:

Group velocity control for x-ray photons.

Hatsagortsyan, K. Z.:

Spin flip in ionization of highly charged ions.

Keitel, C. H.:

X-ray interactions with highly charged ions and nuclei (Seminar 1).

Relativistic quantum dynamics in very intense laser pulses (Seminar 2).

High-energy processes in extremely high-intensity laser interactions (Symposium).

Pálffy-Buß, A.:

Controlling single x-ray photons via coherence effects in nuclear ensembles (Seminar 1).

Laser-nucleus reactions leading far from the valley of stability (Seminar 2).

Salamin, Y. I.:

Direct Laser Acceleration of Charged-particles for Tumor Therapy.

St. Goar, Germany, STORI'14 - 9th International Conference on Nuclear Physics at Storage Rings (28.09.-03.10.2014)

Blaum, K.:

Penning traps for fundamental tests of nature.

von Hahn, R.:

The Cryogenic Storage Ring Project

Wolf, R.:

Precision mass measurements of exotic ions with an MR-ToF system.

St. Michael, Austria, Workshop of Accelerator-, Plasma and Astrophysics (23.02.-01.03.2014)

von Hahn, R.:

The CSR - close to commissioning.

Stockholm, Sweden, NORDITA Program "News in Neutrino Physics" (07.04.-02.05.2014)

Kopp, J.:

Sterile Neutrinos on Earth and in the Skies.

Strasbourg, France, 13th European Summer School "From the Mystery of Mass to Nobel Prizes" (06.07.-07.06.2014)

Rodejohann, W.:

Lepton Mixing and Neutrino Mass.

Sussex, England, 4th Workshop on Flavor Symmetries and consequences in Accelerators and Cosmology "FLASY 2014" (17.06.-21.06.2014)

Lindner, M.:

Neutrino Masses and Conformal Electro-Weak Symmetry Breaking.

Rodejohann, W.:

Neutrinoless Double Beta Decay.

Suwon, South Korea, The 6th East-Asian Numerical Astrophysics Meeting (EANAM) (15.09.-19.09.2014)

Takamoto, M.:

A New Numerical Method for the Relativistic Magnetohydrodynamics with Dissipation and its Applications to High-Energy Phenomena.

Suzdal, Russia, 18th International Seminar on High Energy Physics, Quarks 2014 (02.06.-08.06.2014)

Domainko, W.:

Recent highlights from H.E.S.S.

Szeged, Hungary, ELI-ALPS 2nd User Workshop (11.09.-12.09.2014)

Moshammer, R.:

Strong-field Atomic and Molecular Physics using Reaction Microscopes.

Tabarz, Germany, ISM-SPP Laboratory Astrophysics Workshop (16.10.-18.10.2014)

Kreckel, H.:

Chemical Reactions in the Gas Phase.

Wolf, A.:

Excitation and cooling of large molecular and cluster ions

Takamatsu, Japan, Trapped Charged Particles and Fundamental Physics TCP 2014 (28.11.-05.12.2014)

Eliseev, S.:

PI-ICR technique and PENTATRAP.

Nagy, Sz.:

High-precision Penning-trap mass measurements at TRIGA-TRAP.

Sturm, S.:

The g-factor of Highly Charged Ions – Stress Test for the Standard Model and Access to the Atomic Mass of the Electron.

Versolato, O.:

Coulomb-crystallized highly charged ions.

Wolf, R.:

Multi-reflection time-of-flight mass separation and spectrometry at ISOLTRAP/ISOLDE.

Tomakomai, Hokkaido, Japan, 67th Fujihara Seminar (24.09.-27.09.2014)

Pfeifer, T.:

Physics of Resonances in Short and Strong Fields.

Trento, Italy, ECT Workshop “Future Directions in the Physics of Nuclei at Low Energies” (21.05.-23.05.2014)

Eliseev, S.:

Penning Trap Mass Spectrometry for Neutrino Physics.

Trento, Italy, ECT* Workshop: Resonances and non-hermitian quantum mechanics in nuclear and atomic physics (23.06.-27.06.2014)

Evers, J.:

Quantum optics with nuclei.

Trento, Italy, International Workshop on QCD and Forward Physics at the LHC (14.04.-18.04.2014)

Volyanskyy, D.:

Latest LHCb results on QCD processes in pp and pPb collisions.

Valencia, Spain, 37th International Conference on High Energy Physics (ICHEP) 2014 (02.07.-09.07.2014)

Haser, J.:

Current status of the Double Chooz experiment.

Lindner, M.:

Neutrino properties: Highlights of non-oscillation results (Plenarvortrag).

Volyanskyy, D.:

Soft QCD measurements at LHCb.

Vienna, Austria, International Workshop on Thorium Nuclear Spectroscopy (05.05.-06.05.2014)

Pálffy-Buš, A.:

Theoretical Approaches to Thorium Nuclear Spectroscopy.

Vietri sul Mare, Italy, FAIRNESS 2014 (22.09.-27.09.2014)

Sturm, S.:

The g-factor of Highly Charged Ions - Stress Test for the Standard Model and Access to Fundamental constants.

Wako-shi, Japan, Post-TCP workshop on mass measurement, RIKEN (08.12.2014)

Wolf, R.:

The ISOLTRAP MR-ToF-MS and its applications at ISOLDE.

Waltham, Massachusetts, USA, 17th Gordon Research Conference on Multiphoton Processes (15.06.-20.06.2014)

Keitel, C. H.:

Extremely high-intensity laser interactions with fundamental quantum systems.

Pfeifer, T.:

Fano Phase Control in Helium, and Beyond or Resonances in Short and Strong Fields.

Warsaw, Poland, University, TMEX 2014 Theory Meeting Experiment 2014: Neutrinos and Cosmos (03.09.-05.09.2014)

Lindner, M.:

Sterile Neutrinos: Motivation, status and prospects.

Washington D.C., USA, ICAP 2014, 24th International Conference on Atomic Physics (03.08.-08.08.2014)

Blaum, K.:

Fundamental tests of nature and a high-precision measurement of the atomic mass of the electron.

Worms, Germany, International Conference on Science and Technology for FAIR in Europe 2014 (13.10.-17.10.2014)

Blaum, K.:

Nuclear Masses and their Importance for Nuclear Structure, Nuclear Astrophysics and Fundamental Studies.

Di Piazza, A.:

Testing Quantum Electrodynamics at critical background electromagnetic fields.

Yerevan, Armenia, 1st Scientific ICRA-Net Meeting in Armenia (30.06.-04.07.2014)

Di Piazza, A.:

Investigating vacuum-polarization effects with ultra-intense laser fields.

Hatsagortsyan, K. Z.:

Critical field phenomena in ultrastrong laser fields.

Keitel, C. H.:

X-ray interactions with highly charged ions and nuclei.

Yerevan-Ashtarak, Armenia, 2nd International Symposium on Optics and its Applications (30.08.-05.09.2014)

Hatsagortsyan, K. Z.:

Laser-induced spin dynamics in above-threshold ionization.

York, UK, 5th EURISOL Topical Meeting (15.07.-17.07.2014)

Kreim, S.:

Precision spectrometry with ion traps for next-generation beams.

Zhangjiajie, China, International Workshop on Strong Field Physics and Ultrafast Phenomena (SFPUP 2014) (01.11.-06.11.2014)

Hatsagortsyan, K. Z.:

Radiation reaction and high-energy processes in superstrong laser fields.

Zürich, ETH, Switzerland, Advanced Scientific Computing Workshop (14.07.2014)

Voss, H.:

Multivariate Data Analysis Methods.

Zürich, Switzerland, Workshop SHIP - Search for Hidden Particles (10.06.-12.06.2014)

Lindner, M.:

The scale of see-saw and models for neutrino masses.

At Other Institutes

Akhmedov, E.:

Sterile neutrinos and oscillation coherence for neutrinos produced in decays.

Karlsruhe, Germany, KIT Campus Nord seminar (27.05.2014) and

Bern, Switzerland, University of Bern LHEP seminar (07.05.2014)

Bennitt, S.:

Permanent magnet based compact electron beam ion traps for spectroscopy, polarimetry and metrology at ultrabright light sources.

Gießen, Germany, Atomphysik-Seminar, Justus-Liebig-Universität Gießen (30.10.2014)

Blaum, K.:

Fundamental tests of nature with cooled and stored exotic ions.

Wien, Austria, VERA Seminar, Universität (09.01.2014) and

Braunschweig, Germany, PTB (13.01.2014) and

Hannover, Germany, Universität (14.01.2014) and

Argonne, USA, National Laboratory (18.02.2014) and

Lansing, USA, Michigan State University (20.02.2014) and

Geneva, Switzerland, CERN (26.06.2014) and

Berkeley, USA, Seminar Physics Division, Lawrence Berkeley National Lab. (07.08.2014) and

Rio de Janeiro, Brasil, Colloquium, Instituto de Fisica, Universidade Federal (28.08.2014) and

Bochum, Germany, Theoretische Physik III, Ruhr-Universität (27.10.2014) and

Basel, Switzerland, Kolloquium, Universität (31.10.2014)

Vom Elektron und Proton zum kosmischen Antimaterie-Rätsel.

München, Germany, Deutsches Museum (08.10.2014)

Wie Gold entsteht - oder: Warum ist Eisen häufiger als Gold?

Bad Kreuznach, Germany, Sternwarte (28.02.2014)

Fundamental tests of nature and a high-precision measurement of the atomic mass of the electron.

Heidelberg, Germany, Teilchenphysik Kolloquium, Universität (25.11.2014)

Bordas Coma, P.:

Discovery of large-scale X-ray jets from the runaway pulsar IGR J11014-6103.

Tübingen, Germany, IAAT, Astrophysikalisches Kolloquium (27.01.2014)

Cavaletto, S. M.:

Unveiling and Controlling Nonlinear Dynamical Effects in X-Ray Spectra.

Castelldefels, Barcelona, Spain, ICFO - The Institute of Photonic Sciences, Seminar (20.11.2014)

X-ray frequency combs from optical control of highly charged ions.

Heidelberg, Germany, Heidelberg University, Joint University-MPI seminar on Atomic physics in strong electromagnetic fields (05.02.2014)

Crespo López-Urrutia, J.R.:

From MK to mK: laser spectroscopy and cooling of highly charged ions.

Innsbruck, Austria, Institutsseminar Universität Innsbruck (30.04.2014)

Cooling highly charged ions with Coulomb crystals for laser spectroscopy.

Düsseldorf, Germany, Seminar Universität Düsseldorf (16.06.2014)

X-ray laser spectroscopy of HCl: Testing QED with advanced light sources.

Darmstadt, Germany, GSI, FLAIR Seminar (24.06.2014)

From the MK to the mK: Highly charged ions across temperature scales

Heidelberg, Germany, Physics Colloquium (24.10.2014)

Highly charged ions: Novel targets for laser from the visible to the X-ray region.

Amsterdam, Netherlands, FU Amsterdam, Colloquium (12.12.2014)

Di Piazza, A.:

Quantum electrodynamical effects at critical background electromagnetic fields.

Aarhus, Denmark, Department of Physics and Astronomy, Aarhus University, General Physics Colloquium (04.11.2014)

Strong-field QED in background fields of complex structure.

Gothenburg, Sweden, Chalmers University of Technology, Physics Colloquium (08.07.2014)

Novel aspects of classical and quantum radiation reaction.

Yerevan, Armenia, Synchrotron Research Institute, Physics Colloquium (30.06.2014) and

Pisa, Italy, Department of Physics, University of Pisa, Physics Colloquium (05.05.2014)

Tests of classical and quantum electrodynamics with strong laser fields.

Novosibirsk, Russia, Budker Institute of Nuclear Physics SB RAS, Theory Seminar (06.03.2014)

Dilling, J.:

Understanding the Universe; one rare isotopes at a time.

Heidelberg, Germany, Universität (28.11.2014)

Dorn, A.:

A Reaction Microscope to Study Electron Impact Ionization.

Shanghai, China, Shanghai Advanced Research Institute, Chinese Academy of Sciences (15.05.2014)

Duerr, M.:

New Gauge Theories for Baryon and Lepton Numbers.

Southampton, UK, Friday Seminar, High Energy Physics Group (06.06.2014)

New Gauge Theories for Baryon and Lepton Numbers.

Oxford, UK, Particles & Fields Seminar, Particle Theory Group (05.06.2014)

Eliseev, S.:

PI-ICR technique for high-precision measurements of nuclide masses.

Mainz, Germany, Seminar at TRIGA 2014 (08.12.2014)

Evers, J.:

Gebändigtes Röntgenlicht: Quantenzustände aus dem Nichts.

Gießen, Germany, Justus Liebig University, Röntgen-Lecture (20.11.2014)

X-ray quantum optics from Mößbauer to Fano.

Vienna, Austria, Institute for Theoretical Physics, Vienna University of Technology, Theoretical Physics Seminar (20.05.2014)

Feuerstein, B.:

Astroteilchenphysik.

Limburg a. d. Lahn, Germany, Rotary Club Limburg, Vortragsabend (30.09.2014)

Grieser, M.:

The TSR storage ring at ISOLDE/CERN.

Darmstadt, Germany, Atomic Physics seminar GSI (01.07.2014)

Hatsagortsyan, K. Z.:

Radiation reaction effects and high-energy processes in ultrastrong laser fields.

Gwangju, South Korea, Center for Relativistic Laser Science (CoReLS), BSI, GIST, Seminar of CoReLS (04.12.2014)

Heisel, M.:

Neutrinoless double beta decay with GERDA.

Bern, Switzerland, Albert Einstein Center for Fundamental Physics, Universität Bern (29.10.2014)

Results from GERDA Phase I: New limit on neutrinoless double beta decay of Ge-76.

Saclay, France, CEA Saclay (03.02.2014)

Hofmann, W.:

TeV gamma ray astronomy with H.E.S.S.: The first decade.

Abu Dhabi, Vereinigte Arabische Emirate, New York University, Colloquium (29.04.2014)

Very high energy gamma ray astronomy: from H.E.S.S. to CTA.

Heidelberg, Germany, Haus der Astronomie, Colloquium (01.07.2014)

Die Galaxie in einem neuen Licht: Astronomie mit Gammastrahlen.

München, Germany, Carl Friedrich von Siemens Stiftung, Seminar (30.06.2014) and

Heidelberg, Germany, Akademie der Wissenschaften, Seminar (24.10.2014)

Keitel, C. H.:

Extremely high-intensity laser interactions with fundamental quantum systems.

Yerevan, Armenia, Yerevan State University, Physics Seminar (02.07.2014) and

Aachen, Germany, RWTH Aachen University, Physics Colloquium (12.05.2014)

Kellerbauer, A.:

AEGIS – Measuring the free fall of antihydrogen.

Annecy, France, Laboratoire d'Annecy-le-Vieux de Physique des Particules (28.03.2014)

High-precision studies with antihydrogen – Why antimatter matters.

Gothenburg, Sweden, General Physics Colloquium, Chalmers University / University of Gothenburg (27.05.2014)

High-precision studies with antihydrogen at CERN.

Aachen, Germany, Graduiertenkolleg Teilchen- und Astroteilchenphysik, RWTH (11.11.2014)

Das Antimaterie-Rätsel.

Mannheim, Germany, Physikalisches Kolloquium, Universität (20.11.2014)

Kirk, J.G.:

Electron-positron pair creation in intense laser beams.

Belfast, UK, Department of Physics, Queen's University (21.01.2014)

Pulsar-wind termination shocks.

Strasbourg, France, Observatoire de Strasbourg (21.03.2014) and

Valencia, Spain, Department of Astronomy and Astrophysics, University of Valencia (15.04.2014)

Kreckel, H.:

Molecular Astrophysics at the Max Planck Institute for Nuclear Physics.

Karlsruhe, Germany, KIT (11.11.2014)

Astrophysik im Labor: Wie im Weltraum Wasser und andere Moleküle entstehen.

Mannheim, Germany, Planetarium (03.12.2014)

Kumar, N.:

Influence of the radiation reaction force on the electronic parametric instabilities of an ultra-intense laser pulse in plasmas.

Shanghai, China, Shanghai Jiao Tong University, Physics Colloquium (28.04.2014)

Liao, W.:

Coherent control of X-ray photons and nuclei.

Hamburg, Germany, Center for Free-Electron Laser Science, CFEL Seminars & Colloquia (11.06.2014)

Quantum Control of Nuclei.

College Station, Texas, USA, The Institute for Quantum Science and Engineering (IQSE), TAMU, Special AMO/QO Physics Seminar (27.01.2014)

Lindner, M.:

Neutrino Masses and Conformal Electro-Weak Symmetry Breaking.

Beijing, China, Seminar at ITP (31.10.2014)

Dunkle Materie.

Dortmund, Germany, Kolloquium an der Universität (17.06.2014)

Sind Neutrinos ihre eigenen Antiteilchen?

Heidelberg, Germany, Kolloquium an der Universität (13.06.2014)

Dark Matter.

Moscow, ITEP International Winter School (14.02.-19.02.2014)

Mackenroth, K. F.:

Quantum radiation from ultrashort, intense laser pulses.

Gothenburg, Sweden, Chalmers University of Technology, Special Seminar (27.05.2014)

Marrodán Undagoitia, T.:

Astrophysical searches for dark matter.

Aachen, Germany, Seminar of the Graduate School Particle and Astro-Particle Physics in the Light of the LHC (11.2014)

Revealing the nature of dark matter with XENON.

Heidelberg, Germany, Teilchenkolloquium (01.07.2014)

Moshammer, R.:

AMO Experiments at BL2 and BL3 with a Reaction Microscope.

Hamburg, Germany, DESY (07.10.2014)

Experiments with Atoms and Molecules using XUV and IR Laser Fields.

Halle, Germany, Seminar, University Halle (14.04.2014) and

Marburg, Germany, Colloquium, University Marburg (22.05.2014)

Time Resolved Experiments with Atoms and Molecules at FLASH.

Berlin, Germany, Colloquium, DESY Zeuthen (16.04.2014)

Nagy, Sz.

High-precision Penning-trap mass measurements of long-lived transuranium nuclides at TRIGA-TRAP.

Darmstadt, Germany, Atomphysik-Seminar GSI (08.07.2014)

Oreshkina, N. S.:

Astrophysical line diagnosis requires nonlinear dynamical atomic modeling.
Gießen, Germany, Justus Liebig University, Atomic Physics Seminar (10.12.2014)

Pálffy-Buß, A.:

Nuclear and atomic quantum dynamics with strong optical, x-ray and gamma-ray fields.
Zurich, Switzerland, ETH Zurich, Institute for Quantum Electronics, Laser Seminar (08.12.2014)
X-ray interactions from single particles to complex systems.
Berlin, Germany, Max Born Institute, Colloquium (03.12.2014)
NEEC in hot and cold plasmas.
Berkeley, California, USA, Lawrence Berkeley National Laboratory, Nuclear physics seminar (12.08.2014)
Coupling nuclei to the atomic shell.
Münster, Germany, Institute for Nuclear Physics, University of Münster, Kernphysikseminar (31.01.2014)

Pfeifer, T.:

Listening to the ultrafast talk of two excited electrons – And asking them physics questions.
Darmstadt, Germany, Colloquium, Institute for Applied Physics (03.11.2014)

Rodejohann, W.:

Neutrinoless Double Beta Decay and Particle Physics.
Manchester, England, Manchester University (18.10.2014)

Schmelling, M.:

Quarkonia production in pPb collisions.
CERN, Geneva, Switzerland, Collider Cross talk (05.06.2014)
Forward Particle Production at the LHC.
Dortmund, Germany, TU Dortmund (15.07.2014)

Skoromnik, O. D.:

About electron scattering in external electromagnetic fields.
Jena, Germany, Helmholtz Institute Jena, Institute's seminar (28.10.2014)

Smirnov, A. Y.:

Lepton mixing: what is behind?
Amsterdam, The Netherlands, Dutch National Seminar on Theoretical High Energy Physics, NIKHEF (21.11.2014)
SuperPINGU for measurements of the leptonic CP-violation.
MIAPP workshop „Neutrinos in Astro- and Particle Physics“ (02.07.2014)

Sturm, S.:

Ein Leichtgewicht auf der Waage - wie wiegt man ein Elektron?
Manheim, Germany, FH (02.04.2014)

Versolato, O.:

Rotation cooling of Coulomb-Crystallized MgH⁺ using ultra-tenuous helium buffer gas.
Heidelberg, Germany, CQD colloquium pretalk, University of Heidelberg (07.05.2014)

Wolf, R.:

First on-line applications of a multi-reflection time-of-flight mass separator at ISOLTRAP and the mass measurement of 82Zn.
Darmstadt, Germany, GENCO award session, GSI (06.03.2014)

Yakaboylu, E.:

The photoelectron momentum distribution and the spin dynamics in laser-induced tunnel-ionization.
Vienna, Austria, Austria, Institute of Science and Technology Austria, Lectures & Talks at IST (05.12.2014)

Zatorski, J.:

Theoretical calculations for the determination of the electron mass via measurement of the bound electron g-factor in hydrogen-like carbon.
Warsaw, Poland, Center for Theoretical Physics PAS, CFT Seminar (17.12.2014)

Invited Talks 2015

At Conferences and Symposia

Amherst, MA, USA, International Workshop on Baryon and Lepton Number Violation (BLV2015) (26.04.-30.04.2015)

Duerr, M.:

Baryonic Dark Matter.

Lindner, M.:

Double Beta Decay: Theory Motivation versus the experimental Challenge.

Ohmer, S.:

Low Scale Unification.

Smirnov, J.:

Conformal Inverse Seesaw and Warm Dark Matter.

Arlington, USA, Applied Antineutrino Physics 2015 (07.12.-08.12.2015)

Haser, J.:

The potential to resolve spectral anomalies with different reactor experiments.

Bad Honnef, Germany, 594. WE-Heraeus-Seminar on Spectroscopy and Applications of Cold Molecular Ions. (15.06.-18.06.2015)

Kreckel, H.:

Experimental studies of ion-neutral collisions relevant for interstellar chemistry.

Bad Honnef, Germany, Heraeus Seminar on Astrophysics, Clocks and Fundamental Constants (27.05.-30.05.2015)

Blaum, K.:

Precision measurements in Penning traps for fundamental studies.

Beijing, China, The 2nd International Workshop on Frontiers in Quantum Optics and Quantum Information: Celebration of the International Year of Light (QOQI2015) (26.04.-28.04.2015)

Longo, P.:

Classifying Superradiance in Extended Media.

Beijing, China, Workshop of Jinping Neutrino Program, Tsinghua University (05.06.2015)

Ge, Shaofeng:

Atmospheric and Accelerator Neutrino Physics at Jinping Undergrand Laboratory.

Beijing, China, Workshop on Physics at CEPC, IHEP (10.08.2015)

Ge, Shaofeng:

CEPC Higgs Physics.

Berlin, Germany, BESSY, Workshop: From Pico to Femto – Time Resolved Studies at BESSY II (26.01.-27.01.2015)

Moshammer, R.:

Molecular Dynamics in Slow-Motion: Experiments with Ultra-Short XUV Pulses.

Berlin, Germany, DPG Annual Meeting (15.03.-20.03.2015)

Moshammer, R.:

Atomic and Molecular Reactions in Slow-Motion. (plenary talk)

Berlin, Germany, LeadNet meeting of research group leaders of the Max Planck Society (15.04.2015)

Kellerbauer, A.:

Antimatter - Science or Fiction?

Berlin, Germany, Max Planck Research Group Selection Symposium (10.02.-12.02.2015)

Pálffy-Buß, A.:

Nuclei in the light of novel coherent sources.

Berlin, Germany, Relativistic Laboratory Astrophysics Workshop (22.11.-25.11.2015)

Giacinti G.:

The onset of particle acceleration at supernova shock break-out.

Giacchè S.:

First-order Fermi acceleration at pulsar wind termination shocks.

Blois, France, 27th Rencontres de Blois "Particle Physics and Cosmology" (31.05.-05.06.2015)

Collin, A.:

Latest results from the Double Chooz experiment.

Bordeaux, France, 11th Super Intense Laser-Atom Physics (SILAP) (07.09.-10.09.2015)

Ott, C.:

Dynamics of correlated electrons in ultrasoft electric fields: From simple to complex systems.

Moshammer, R.:

Time Resolved Atomic and Molecular Dynamics in XUV and IR Laser Fields.

Bordeaux, France, Workshop of the APOLLON "High-Field Group" (09.09.2015)

Di Piazza, A.:

Quantum radiation reaction at the APOLLON facility.

Borgo, Corsica, EDS Blois 2015, 16th International Conference on Elastic and Diffractive Scattering (29.06.-04.07.2015)

Schmelling, M.:

Quarkonia and heavy-quark production in proton and nuclear collisions at the LHC.

Bucharest, Romania, International Conference on Extreme Light (ICEL2015) (23.11.-27.11.2015)

Keitel, C. H.:

High-energy physics with extremely intense laser pulses.

Budapest, Hungary, International Conference on Precision Physics and Fundamental Constants (12.10.-16.10.2015)

Harman, Z.:

Theory of the bound-electron g-factor.

CERN, Geneva, Switzerland, Data Science @ LHC 2015 Workshop (09.11.2015)

Voss, H.:

TMVA tutorial.

Chicago, USA, Fermilab, International Meeting for Large Neutrino Infrastructures (26.04.-30.04.2015)

Lindner, M.:

Neutrino parameter measurements, a theoretical perspective.

Columbus, Ohio, USA, DAMOP meeting (10.06.2015)

Crespo López-Urrutia, J.R.:

Coulomb crystallization of highly charged ions.

Crete, Greece, SPARC topical workshop (22.09.-27.09.2015)

von Hahn, R.:

First operation of the Cryogenic electrostatic Storage Ring CSR.

Darmstadt, Germany, Concluding Conference of Collaborative Research Center 634 (09.06.2015)

Blaum, K.:

Precision mass measurements for nuclear structure, astrophysics and fundamental studies.

Darmstadt, Germany, NUSTAR Annual Meeting (02.03.-06.03.2015)

Dilling, J.:

The Nuclear Physics Program at TRIUMF.

George, S.:

Time-of-flight-B ρ mass measurements.

Manea, V.:

Recent results and developments at ISOLTRAP.

Deadwood, South Dakota, USA, IX International Conference on Interconnections between Particle Physics and Cosmology (28.05.-03.06.2015)

Wagner, V.:

Status of the GERDA Phase II Upgrade.

Delhi, India, 4th International Conference of Current Developments in Atomic, Molecular Optical and Nano Physics with application, CDAMOP 2015 (11.03.-14.03.2015)

Blaum, K.:

Fundamental tests of nature and a high-precision measurement of the atomic mass of the electron.

Harman, Z.:

X-ray spectroscopy with highly charged ions.

Dolní Brežany + Kamenice (near Prague), Czech Republic, ELI Beamlines Scientific Challenges 2015 (SCH2015) (19.10.-22.10.2015)

Keitel, C. H.:

High energy quantum physics with extreme lasers.

Dresden, Germany, International Workshop on Atomic Physics (23.11.-27.11.2015)

Moshammer, R.:

Atoms and Molecules in Strong Fields: Time resolved experiments.

Edmonton, Canada, CAP CINP town hall meeting (14.06.-15.06.2015)

Dilling, J.:

The science program with TITAN at ISAC and ARIEL.

Geneva, Switzerland, 28th Texas Symposium on Relativistic Astrophysics (14.12.-18.12.2015)

Hinton, J.:

The Gamma-Ray Universe.

Geneva, Switzerland, ISOLDE Workshop (02.12.-04.12.2015)

Manea, V.:

Testing classical concepts with the help of modern techniques at ISOLTRAP.

Geneva, Switzerland, TSR@ISOLDE Workshop 2015, CERN (27.04.-28.04.2015)

Blaum, K.:

TSR Status report.

Wolf, A.:

Atomic Physics Experiments with Multiply Charged Ions in TSR@ISOLDE.

Grand Rapids, USA, International Conference on Electromagnetic Isotope Separators and Related Topics (EMIS) (11.05.-15.05.2015)

Wolf, R.:

Multi-reflection time-of-flight mass separation and spectrometry.

Groningen, The Netherlands, Nuclear Physics Conference (30.08.-04.09.2015)

Blaum, K.:

Master class - Basics of atomic physics techniques for nuclear structure studies

Blaum, K.:

Nuclear masses and their importance for nuclear structure, nuclear astrophysics and fundamental studies.

Hamburg, Germany, 3rd International Conference on the Applications of the Mössbauer Effect (ICAME2015) (13.09.-18.09.2015)

Pfeifer, T.:

Coherent control of atomic and nuclear resonance.

Hamburg, Germany, DESY Theory Workshop 2015 „Physics at the LHC and beyond“ (29.09.-02.10.2015)

Rodejohann, W.:

Lepton Flavor and Number Physics.

Smirnov, J.:

Light from Dark Matter.

Hamburg, Germany, DESY, Photon Science Committee Meeting (06.05.2015)

Moshammer, R.:

Atomic and Molecular Physics at FLASH.

Hamburg, Germany, FLASH-II Ion Physics meeting (02.06.2015)

Crespo López-Urrutia, J.R.:

FEL physics with sympathetically cooled ions.

Heidelberg, Germany, 25th International Workshop on Weak Interactions and Neutrinos, WIN2015 (08.06.-13.06.2015)

da Silva Queiroz, F.:

Dark Z' Portal.

Duerr, M.:

Baryonic Dark Matter.

Ohmer, S.:

Dark Matter and Gauged Baryon Number.

Smirnov, A. Y.:

MSW: Now and 30 years ago.

Smirnov, J.:

Conformal Inverse Seesaw, Lepton Number Violation and Dark Matter.

Heidelberg, Germany, DPG Frühjahrstagung (23.03.-27.03.2015)

Dilling, J.:

Precision mass measurements of short-lived isotopes.

Mass measurements of radioactive isotopes for nuclear physics.

Eliseev, S.:

Penning-Trap Mass Spectrometry for Neutrino Physics.

Evers, J.:

X-ray quantum optics: From Mößbauer to Fano (Main Talk).

von Hahn, R.:

The Cryogenic electrostatic Storage Ring CSR.

Haser, J.:

The potential to resolve spectral anomalies with different reactor experiments.

Mishra, P. M.:

Collective excitation in energetic proton collision with naphthalene.

Wolf, A.:

Cryo-stored ion beams for studying neutral production in molecular fragmentation.

Heidelberg, Germany, Inaugural Meeting of the Heidelberg Initiative for the Origin of Life, MPIA (23.04.2015)

Kreckel, H.:

Laboratory studies of the formation of interstellar molecules.

Heidelberg, Germany, ITP, Symposium on diffractive physics and LHC (20.07.2015)

Schmelling, M.:

Diffraction physics at LHCb.

Heidelberg, Germany, Laboratory Astrophysics Workshop (01.10.-02.10.2015)

George, S.:

The Cryogenic Storage Ring (CSR): Commissioning and first results.

Novotný, O.:

DR @ TSR & CSR.

Heidelberg, Germany, Mainz, Germany, MITP Program "Crossroads of Neutrino Physics" (20.07.-14.08.2015)

Akhmedov, E.:

Another look at collective neutrino oscillations.

Heidelberg, Germany, MPIK, lecture at workshop "Python for gamma-ray astronomy" (16.11.-20.11.2015)

Schmeling, M.:

Statistics for Gamma-Ray Astronomy.

Heidelberg, Germany, Review Panel Meeting CANREB-EBIS (02.07.2015)

Crespo López-Urrutia, J.R.:

Electron beam ion sources and traps at MPIK.

Heidelberg, Germany, Variable Galactic Gamma-ray Sources III Workshop (04.05.-06.05.2015)

Bordas Coma, P.:

Variable Galactic Gamma-ray Sources with H.E.S.S.

Giacchè, S.:

Electron acceleration in gamma-ray binaries.

Rieger, F.M.:

Stochastic and shear particle acceleration in expanding outflows.

Hirschegg, Austria, International Workshop XLIII on Gross Properties of Nuclei and Nuclear Excitations 2015 "Nuclear Structure and Reactions: Weak, Strange and Exotic" (11.01.-17.01.2015)

Dilling, J.:

Precision Mass Measurements for Nuclear Physics.

Eliseev, S.:

Penning-Trap Mass Spectrometry for Neutrino Physics.

Hohenroda, Germany, EURORIB 2015 (07.06.-12.06.2015)

Dilling, J.:

Status and future perspective with RIB facilities in North America.

Eliseev, S.:

Penning-Trap Mass Spectrometry for Neutrino Physics.

Horny Smokovec, Slovakia, 6th International Pontecorvo Neutrino Physics School (27.08.-04.09.2015)

Rodejohann, W.:

Theory of Neutrino Masses.

Irsee, Germany, Symmetries and phases in the Universe (22.06.2015)

Marrodán Undagoitia, T.:

Direct dark matter searches and the XENON experiment.

Ischia, Italy, INFN School of Statistics 2015 (25.05.-29.05.2015)

Voss, H.:

Multivariate Discriminators.

Jurata, Poland, Workshop on Atomic and Molecular Physics (14.09.-18.09.2015)

Wolf, A.:

Resonant low-energy collisions of electrons and molecular ions: Measurements and new directions at a cryogenic ion storage ring.

Jyväskylä, Finland, NDM15 Symposium - Neutrinos and Dark Matter in Nuclear Physics (01.06.-05.06.2015)

Blaum, K.:

Precision Penning-trap mass measurements for neutrino physics studies.

Rodejohann, W.:

Right-handed Currents in Single and Double Beta Decay.

Karlsruhe, Germany, "Composition 2015" workshop (21.09.-23.09.2015)

Giacinti G.:

Cosmic Ray Anisotropy and Composition in the Sub-Ankle Region as a Way to Constrain the Energy of the Transition from Galactic to Extragalactic Cosmic Rays.

Cosmic Ray Acceleration at Supernova Remnants, and Galactic CR Maximum Energy.

Kashiwa, Japan, TeV Particle Astrophysics (TeVPA) 2015 (26.10.-30.10.2015)

Viana, A.:

Highlights from the H.E.S.S. telescope array: gamma-ray astronomy from 20 GeV to hundreds of TeV's.

Zanin, R.:

Gamma-ray pulsars and pulsar wind nebulae.

Kiel, Germany, Herbsttagung der Astronomischen Gesellschaft (14.09.-18.09.2015)

Hinton, J.:

The CTA Project.

Kielce Technology Park, Poland, XLIII Zjazd, Polish Physical Society (08.09.2015)

Hofmann, W.:

Astronomy with Very High Energy Gamma Rays: The Sky in a New Light.

Kolkata, India, Advances in Astroparticle Physics and Cosmology (12.10.-17.10.2015)

Chakraborty, N.:

Cosmic accelerators with HESS.

Kolymbari, Crete, Greece, Conference on New Frontiers in Physics ICNFP 2015 (23.08.-30.08.2015)

Heisel, M.:

Neutrinoless Double Beta Decay in GERDA.

Kellerbauer, A.:

Probing Antimatter Gravity.

Krakow, Poland, workshop "Relativistic jets: creation, dynamics, and internal physics" (19.04.-24.04.2015)

Kirk, J.G.:

Particle acceleration in relativistic jets.

La Palma, Spain, workshop "The future of Research on Cosmic Gamma Rays" (26.08.-29.08.2015)

Aharonian F.A.:

The scientific tasks of the new generation instruments in different energy bands.

Lauterbad, Germany, Lecture at "Hüttenseminar der ANKA THz-Gruppe" (19.01.-22.01.2015)

Schmeling, M.:

The Art of Dealing with Uncertainties.

Les Houches, France, Winterschool on Trapped Ions (19.01.-30.01.2015)

Blaum, K.:

Mass spectrometry with cooled and stored ions in Penning traps – Lecture 1.

Mass spectrometry with cooled and stored ions in Penning traps – Lecture 2.

Liverpool, UK, Reflections on the atomic nucleus conference (28.07.-30.07.2015)

Blaum, K.:

Precision Measurements of Nuclear Ground-state Properties for Nuclear Structure, Astrophysics and Fundamental Studies.

Meinerzhagen, Germany, Lecture at school: "Precision measurements in top-quark and bottom-quark physics" (21.09.-25.09.2015)

Schmeling, M.:

Statistical Methods.

Meudon, Paris, Observatoire de Paris, Multi-TeV and beyond: SST sciences and the GCT project for the high energy section of CTA (19.11.-02.12.2015)

Hinton, J.:

Cosmic PeVatrons.

Hofmann, W.:

The CTA Project.

Mumbai, India, 2nd International Workshop on Dissociative Electron Attachment (18.11.-20.11.2015)

Dorn, A.:

Momentum Imaging for Dissociative Electron Attachment of Biologically Relevant Molecules.

Munich, Germany, APPEC meeting (22.04.2015)

Marrodán Undagoitia, T.:

Photomultipliers for future noble-liquid dark matter detectors.

Munich, Germany, Neutrinos from GUT down to low energies (25.11.-27.11.2015)

Yaguna Toro, C. E.:

Scalar dark matter in the B-L model.

Munich, Germany, nuClock Kick-off Meeting (14.09.-15.09.2015)

Pálffy-Buß, A.:

Coupling of the atomic and nuclear quantum dynamics in ²²⁹Th.

Newport News, USA, Int. Workshop on Beam Cooling COOL 2015 (28.09.-02.10.2015)

Wolf, A.:

First operation of the Heidelberg CSR for low-energy collision experiments with molecular ion beams.

Newport, New Hampshire, USA, Salve Regina University, Gordon Conference (15.06.2015)

Crespo López-Urrutia, J.R.:

The imperturbable forbidden optical transitions in highly charged ions.

Novosibirsk, Russia, International Workshop on Antiproton Physics and Technology at FAIR, Budker Institute of Nuclear Physics (16.11.-19.11.2015)

Cerchiari, G.:

Towards anion laser cooling.

Obergurgl, Austria, Conference on Gamma-rays and Dark Matter (07.12.-11.12.2015)

Tuffs, R.J.:

Radiation Fields in the Milky Way and their role in High Energy Astrophysics.

Obergurgl, Austria, HGFSP Winterschool (03.02.2015)

Sturm, S.:

Precision experiments with trapped ions.

Osaka, Japan, Japan Physics Society Annual Meeting (27.09.2015)

Bordas Coma, P.:

Exploring the Galaxy at VHEs with HESS.

Palermo, Italy, FisMat2015 (28.09.-02.10.2015)

Pfeifer, T.:

Fano physics on ultrashort time scales.

Pittsburgh, PA, USA, Phenomenology 2015 Symposium (PHENO 2015) (04.05.-06.05.2015)

Duerr, M.:

Baryonic Dark Matter.

Smirnov, J.:

Implications of a Hidden Sector in the Conformal Framework.

Portoroz, Slovenia, Particle Phenomenology from the Early Universe to High Energy Colliders "Portoroz2015" (07.04.-10.04.2015)

Rodejohann, W.:

Neutrinoless Double Beta Decay.

Potsdam, Germany, 8th FSM Conference (14.10.2015)

Crespo López-Urrutia, J.R.:

(Towards) Frequency metrology using highly charged ions.

Prague, Czech Republic, IMPRS Summer-School on Photoinduced Dynamics (12.07.-15.07.2015)

Moshammer, R.:

Atoms and Molecules in Intense XUV and IR Laser Fields.

Prague, Czech Republic, SPIE Optics + Optoelectronics 2015 (13.04.-16.04.2015)

Keitel, C. H.:

High-energy processes in extremely strong laser pulses.

Princeton NJ, U.S.A., Workshop on "Accelerating cosmic-ray comprehension" (13.04.-16.04.2015)

Kirk, J.G.:

Diffusive shock acceleration at perpendicular shocks?

Princeton, New Jersey, USA, Princeton-TAMU Workshop on Classical-Quantum Interface (27.05.-29.05.2015)

Longo, P.:

Classifying Superradiance in Extended Media.

Puebla, Mexico, HAWC Inauguration (18.03-20.03.2015)

Casanova,S.:

Galactic Sources.

Riezlern Austria, Workshop of Accelerator and Plasma Physics (08.03.-13.03.2015)

von Hahn, R.:

First Beam in the CSR at room temperature.

Rome, Italy, Marcel Grossman Meeting, University of Rome (12.07.-18.07.2015)

Di Piazza, A.:

Generation of neutral and high-density electron-positron pair plasmas in the laboratory.

Hofmann, W.:

The Cherenkov Telescope Array - Perspectives in Relativistic Astrophysics.

Saint-Sauveur, Canada, 5th International Conference on Attosecond Physics (ATTO15) (06.07.-10.07.2015)

Pfeifer, T.:

Controlling Electronic and Nuclear Optical Responses in Atoms – from Attoseconds to Nanoseconds, from VUV to Hard-X-Rays.

San Sebastian, Spain, (e,2e) and polarization correlation workshop (30.07.-01.08.2015)

Dorn, A.:

A thorough study of Young-type interferences in (e,2e) on H₂ molecules.

Schleching, Germany, Arbeitstreffen Kernphysik (19.02.-26.02.2015)

Blaum, K.:

Fundamental tests of nature with cooled and stored exotic ions.

George, S.:

Time-of-flight-Bp mass measurements

Wolf, R.:

Multi-reflection time-of-flight mass separation and spectrometry at ISOLTRAP/ISOLDE.

Sexten, Italy, Sexten School on Astrophysics (27.07.-30.07.2015)

Casanova,S.:

Observations of Galactic Sources with HAWC.

Shanghai, China, The 24th annual International Laser Physics Workshop (LPHYS'15) (21.08.-25.08.2015)

Cavaletto, S. M.:

Line-shape manipulation and phase control for x-ray frequency-comb generation.

Di Piazza, A.:

High-energy recollision processes of laser-generated electron-positron pairs (Seminar 2).

Strong-field QED processes in focused laser fields and experimental results on nonlinear Thomson scattering (Symposium).

Gunst, J.:

Logic gates with x-rays processed by dynamically-controlled nuclear excitation.

Hatsagortsyan, K. Z.:

Relativistic and nonadiabatic effects in strong field ionization.

Heeg, K. P.:

Interferometric Phase Detection of Nuclear Excitation States at X-Ray Energies.

Li, J.:

Ion acceleration by short chirped laser pulses for tumor therapy.

Meuren, S.:

Electron-Positron Photoproduction in Strong Laser Fields: Total Probability, Semiclassical Description and Recollision Processes.

Oreshkina, N. S.:

Strong-fields effects in the XFEL spectroscopy of astrophysically relevant highly charged ions.

Pfeifer, T.:

Controlling optical Responses of Electrons and Nuclei from Attoseconds to Nanoseconds, from VUV to Hard-X-Rays.

Shanghai, China, The SINO-German Symposium on Attosecond Photonics 2015 (16.11.-18.11.2015)

Moshammer, R.:

Atomic and Molecular Reactions in Slow-Motion: Coincidence Experiments with fs-Lasers.

Singapore, International Conference on Massive Neutrinos (07.02.-14.02.2015)

Lindner, M.:

Conformal Electro-Weak Symmetry Breaking and Implications for Neutrinos and Dark Matter.

Smirnov, A. Y.:

Leptonic CP Violation: From Theory to Experiment.

Rodejohann, W.:

Neutrinoless Double Beta Decay.

Snowbird, Utah, USA, The 45th Winter Colloquium on the Physics of Quantum Electronics (PQE-2015) (04.01.-08.01.2015)

Cavaletto, S. M.:

X-ray frequency combs via optical quantum control.

Heeg, K. P.:

Nonlinear Mößbauer physics at an XFEL.

Sofia, Bulgaria, International Workshop "Shapes and Dynamics of Atomic Nuclei: Contemporary Aspects" (08.10.-10.10.2015)

Pálffy-Buß, A.:

Nuclear Isomers in Intense Electromagnetic Fields.

South Dakota, USA, PPC (29.06.-03.07.2015)

Lindner, M.:

Double Beta Decay.

South Hadley, Massachusetts, USA, Quantum Control of Light and Matter – Gordon Research Conferences (02.08.-07.08.2015)

Meyer, K.:

Phase-Controlled Polarization Decay and Line-Shape Modifications in the Liquid Phase.

Stanford, USA, 43rd SLAC Summer Institute „The Universe of Neutrinos“ (10.08.-21.08.2015)

Rodejohann, W.:

Neutrinoless Double Beta Decay: Theory.

Stockholm, Sweden, NORDITA Program "Control of Ultrafast Quantum Phenomena" (18.05.-12.06.2015)

Pfeifer, T.:

Atoms in strong laser fields: What happens before ionization?

Tehran Iran, IPM School and Conference on Particle Physics IPP15 (22.09.-27.09.2015)

Akhmedov, E:

Neutrino physics – present status and theoretical issues.

Another look at collective neutrino oscillations.

The Hague, The Netherlands, 34th International Cosmic Ray Conference (30.07.-06.08.2015)

Aharonian F.A.:

Cosmic particle acceleration after a decade of VHE gamma-ray observations.

Smirnov, A. Y.:

Neutrino properties, Mass hierarchy and CP-violation.

Tokyo, Japan, 6th International Workshop on Electrostatic Storage Devices (08.06.-11.06.2015)

Vogel, S.:

The CSR project in Heidelberg.

Meyer, Christian:

Rotational state thermometry of OH⁻ at the Cryogenic Storage Ring.

Tokyo, Japan, TeVPA (26.10.-30.10.2015)

Zanin, R.:

Pulsars and PWNe in gamma rays.

Tokyo, Japan, Waseda University, JPS, 70th Annual Meeting (22.03.2015)

Hofmann, W.:

The Cherenkov Telescope Array.

Toledo, Spain, International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC) (22.07.-28.07.2015)

Crespo López-Urrutia, J.R.:

Coulomb crystals for sympathetic cooling of molecular and highly charged ions.

Moshammer, R.:

Atomic and Molecular Fragmentation Dynamics in XUV and IR Laser Fields.

Trento, Italy, ECT workshop -The interplay between atomic and nuclear physics to study exotic nuclei (24.08.-27.08.2015)

Blaum, K.:

Precision atomic mass and laser spectroscopy as an ideal combination to answer open questions in nuclear structure physics.

Pálffy-Buš, A.:

Nuclear and atomic quantum dynamics.

Trieste, Italy, Lectures course at the Summer School at the International Centre for Theoretical Physics (15.06.-26.06.2015)

Smirnov, A. Y.:

Neutrinos, selected topics.

Trieste, Italy, PASCOS 2015 - The 21st International Symposium on Particles, Strings and Cosmology (29.06.-03.07.2015)

Smirnov, A. Y.:

Neutrino Properties from the Hidden Sector.

Trieste, Italy, XVI International workshop on Neutrino Telescopes (02.03.-06.03.2015)

Smirnov, A. Y.:

Neutrinos: Projecting onto the Future.

Turin, Italy, XIVth International Conference on Topics in Astroparticle and Underground Physics TAUP 2015 (07.09.-11.09.2015)

Akhmedov, E:

Another look at collective neutrino oscillations.

Smirnov, A. Y.:

Landscape of neutrino physics 2015.

Vail, Colorado, USA, CIPANP 2015 (15.05.-24.05.2015)

Fontana, M.:

Charmless B decays.

Vail, USA, 12th Conference on the Intersections of Particle and Nuclear Physics “CIPANP2015” (19.05.-24.05.2015)

Rodejohann, W.:

Neutrinoless Double Beta Decay and Particle Physics.

Vancouver, Canada, 25th TRIUMF Summer Institute (TSI) "Theory for exploring experiments in light and medium mass nuclei" (13.07.-15.07.2015)

Blaum, K.:

Nuclear mass measurements.

Vancouver, Canada, Erich W. Vogt Science Symposium UBC (07.02.2015)

Dilling, J.:

Erich Vogt's Nuclear Physics Legacy.

Varenna, Italy, 14th International Conference on Nuclear Reaction Mechanisms (15.06.-19.06.2015)

Pálffy-Buß, A.:

Laser-induced reactions in the quasiadiabatic regime.

Varna, Bulgaria, 18th Annual RDMS CMS Collaboration Conference (24.08.-29.08.2015)

Lindner, M.:

Particle and Astroparticle Physics beyond and aside LHC.

Venice, Italy, XVI International Workshop on Neutrino Telescopes (02.03.-06.03.2015)

Buck, C.:

The Double Chooz experiment.

Vienna, Austria, European Physical Society conference on High Energy Physics (EPS-HEP) (22.07.-29.07.2015)

Maneschg, W.:

Borexino: Recent solar and terrestrial neutrino results.

Yaguna Toro, C. E.:

Dark Matter, Neutrino masses and LFV processes in the scotogenic model.

Vienna, Austria, European Physical Society-HEP (28.07.2015)

Hofmann, W.:

High energy cosmic rays: Photons and charged particle.

Vienna, Austria, SFB FoQuS Meeting, Technical University (17.12.-18.12.2015)

Kellerbauer, A.:

Ultracold negative ions.

Warsaw, Poland, Scalars 2015 (03.12.-07.12.2015)

Lindner, M.:

Conformal Electro-Weak Symmetry Breaking and Implications for Neutrinos and Dark Matter.

Washington DC, USA, International Meeting on Laser-Driven Radiation sources for Nuclear Applications (13.12.-15.12.2015)

Pálffy-Buß, A.:

New theoretical insights on the physics of compound nuclei from laser-nucleus reactions.

Wildbad Kreuth, Germany; XLV International Symposium on Multiparticle Dynamics (04.10.-09.10.2015)

Giacinti G.:

Theoretical Interpretations of IceCube Results.

Wuppertal, Germany, DPG Spring meeting, "Teilchenphysik" (09.03.-13.03.2015)

Lubashevskiy, A.:

Status of the GERDA Phase II experiment aimed for the $0\nu\beta\beta$ decay search.

Wagner, V.:

Performance of GERDA Phase II BEGe Detectors.

Wegmann, A.:

LAr instrumentation for GERDA Phase II.

Zaragoza, Spain, 11th PATRAS Workshop on Axions, WIMPs and WISPs (09.03.-13.03.2015)

Lubashevskiy, A.:

Status of preparations for the Phase II of the GERDA experiment aimed for the $0\nu\beta\beta$ decay search.

At Other Institutes

Akhmedov, E.:

Another look at collective neutrino oscillations.

Naples, Italy, University of Naples seminar (21.05.2015)

Barkov, M.:

Rapid TeV and GeV Variability in AGNs as Result of Jet-Star.

Munich, Germany, Max-Planck-Institut für Physik (27.06.2013)

Bennitt, S.:

Electron beam ion traps at ultrabrilliant light sources.

Jena, Germany, Seminar, Helmholtz-Institut Jena (01.07.2015)

Spectroscopy with highly charged ions at ultrabrilliant light sources.

Vienna, Austria, Seminar, Stefan-Meyer-Institut (04.11.2015)

Blaum, K.:

Fundamental tests of nature with cooled and stored exotic ions.

Saarbrücken, Germany, Physikalisches Kolloquium, Universität (05.02.2015)

Vom Elektron und Proton zum kosmischen Antimaterie-Rätsel.

Bad Sobernheim, Germany, Emanuel-Felke-Gymnasium (21.04.2015)

Test of fundamental symmetries with precision Penning-trap experiments.

Heidelberg, Germany, Ringvorlesung AMO Physics in Heidelberg, Kirchhoff-Institute for Physics (08.05.15)

Wie Gold entsteht.

Frankfurt, Germany, Öffentlicher Vortrag (08.05.2015)

Nuclear Ground State Properties and their Importance for Nuclear Structure, Nuclear Astrophysics and Fundamental Studies.

München, Germany, MPP Kolloquium (23.06.2015)

Nuclear Masses and their Importance for Nuclear Structure, Nuclear Astrophysics and Fundamental Studies.

Caen, France, GANIL (06.11.2015)

Precision Measurements of Nuclear Ground-state Properties for Nuclear Structure, Astrophysics and Fundamental Studies.

MEPHI, Moscow, Russia (24.11.2015)

Präzisionstests von fundamentalen Wechselwirkungen und Symmetrien mit gespeicherten exotischen Ionen.

Tübingen, Germany, Physik-Kolloquium, Universität (25.11.2015)

Buck, C.:

Recent developments in reactor neutrino experiments.

Mainz, Germany, Johannes Gutenberg Universität Mainz (04.11.2015)

Cavaletto, S. M.:

Nonlinear dynamical effects and quantum control of x-ray spectra.

Jena, Germany, Helmholtz Institute Jena, Institute's seminar (10.02.2015)

Crespo López-Urrutia, J.R.:

Verboten und dennoch vorhanden - die Linien der Sonnencorona.

Heidelberg, Germany, divulgation talk at Haus der Astronomie (12.03.2015)

Highly charged ions for probing the time variation of fundamental constants.

Berlin, Germany, Physikkolloquium, Humboldt University Berlin (31.05.2015)

Los átomos más calientes del Universo.

Avilés, Spain, divulgation talk at enterpriser's club (20.08.2015)

da Silva Queiroz, F.:

Dark Matter and Global Symmetries.

Karlsruhe, Germany, HAP Dark Matter Meeting (2015)

Highlights on Dark Matter Complementarity.

Mainz, Germany, Johannes Gutenberg Universität Mainz (12.2015)

Probing the Nature of Dark Matter with Dwarf Galaxies.

Heidelberg, Germany, Max Planck Institute for Astronomy (10.2015)

Di Piazza, A.:

Testing classical and quantum electrodynamics with intense laser fields.

Strasbourg, France, Observatoire astronomique de Strasbourg, Physics Seminar (23.10.2015) and

Oxford, United Kingdom, Department of Physics, Oxford University, Atomic and Laser Physics Seminar (12.10.2015)

Tests of classical and quantum electrodynamics with intense laser fields.

Bordeaux, France, Centre Lasers Intenses et Applications (CELIA), Physics Colloquium (07.09.2015) and Trieste, Italy, Department of Physics of the University of Trieste, Alumnorum Colloquia (31.03.2015) and Gif-sur-Yvette, France, IRFU/SPhN, CEA Saclay, Séminaire (27.02.2015)

Ultra high-intensity laser-plasma interaction.

Prague, Czech Republic, invited lecture at ELI Beamlines and HiLASE Summer School (ELISS 2015) (27.08.2015)

Recollision processes in strong-field QED.

Jena, Germany, Helmholtz Institute Jena, Institute's seminar (21.01.2015)

Dilling, J.:

The nuclear physics program at ISAC and ARIEL.

Darmstadt, Germany, GSI (20.01.2015)

Understanding the Universe with rare trapped isotopes.

Leuven, Belgium, Colloquium of the Department of Physics and Astronomy, KU (20.02.2015)

Precision mass measurements of short-lived isotopes.

Zürich, Switzerland, Laboratory for Ion Beams, ETH (26.03.2015)

Precise and accurate mass measurements for fundamental physics.

Braunschweig, Germany, PTB (29.06.2015)

Dobrodey, S.:

ARIEL-EBIT Charge Breeder.

Vancouver, Canada, TRIUMF Science Week 2015, TRIUMF (06.07.-11.07.2015)

Dorn, A.:

Electron and positron impact ionization of atoms, molecules and clusters.

Beijing, China, Tsinghua University (26.05.2015)

Electron Impact Ionization of Atoms and Molecules.

Hefei, China, University of Science and Technology of China (03.06.2015)

Duerr, M.:

Gauge Theories for Baryon and Lepton Numbers.

Heidelberg, Germany, Group Seminar LHC Pheno Group (07.07.2015)

Eliseev, S.:

High-precision methods of mass measurements on nuclides with Penning traps for fundamental physics.

Gatchina, Russia, Seminar at PNPI 2015 (27.10.2015)

Evers, J.:

X-ray quantum optics: From Mößbauer to Fano.

Erlangen, Germany, Max Planck Institute for the Science of Light, Theory Seminar (30.06.2015)

Feuerstein, B.:

Tornado and Severe Weather Research in Europe.

Manhattan, KS, USA, Department of Physics, Kansas State University, Special Seminar (17.11.2015)

Molecular Motion on Laser-Induced Transition States.

Manhattan, KS, USA, Department of Physics, Kansas State University, AMO Seminar (18.11.2015) and

Hannover, Germany, Institut für Quantenoptik, Leibniz Universität, Seminar (08.12.2015)

Tornado and Severe Weather Research in Europe.

Rolla, MO, USA, Physics Department, Missouri University of Science and Technology, Physics Colloquium (19.11.2015)

Ge, Shaofeng:

Neutrino Dirac CP Phase with Residual Symmetries and μ DAR Experiments.

Dortmund, Germany, TU (03.12.2015) and

Valencia, Spain, IFIC (18.11.2015)

The Physics Extentions of JUNO – CP and Effect on $0\nu2\beta$ Decay.

Guangzhou, China, Sun Yat-Sen University (18.08.2015)

Higgs Physics at CEPC.

Guangzhou, China, Sun Yat-Sen University (17.08.2015)

The Georgi Algorithms of Jet Clustering.

Guangzhou, China, Sun Yat-Sen University (17.08.2015) and

Beijing, China, Tsinghua University, Center for High Energy Physics, Academy Forum (02.06.2015)

Precision Measurement of Higgs Couplings at CEPC.
Peking, China, University, Center for High Energy Physics (04.06.2015)

Giacinti, G.:

The Beginning of Particle Acceleration at Supernovae: From Shock breakout to the First Few Decades.
Heidelberg, Germany, Seminar at the Heidelberg Institute for Theoretical Studies (HITS) (11.11.2015)

Grieser, M.:

The TSR storage ring at ISOLDE/CERN.
Chiba, Japan, NIRS (15.09.2015)

Harman, Z.:

Precision physics with highly charged ions.
Jena, Germany, Helmholtz Institute Jena, Institute's seminar (11.11.2015)
Präzisionsphysik mit Ionen.
Braunschweig, Germany, Technische Universität Braunschweig, Vorstellungskolloquium (13.01.2015)

Hatsagortsyan, K. Z.:

Strong field physics in relativistic domain.
Yerevan, Armenia, The Ultrafast Optics Laboratory in the Yerevan State University, Training course on Modern Optics for PhD students (08.09.2015)

Hofmann, W.:

Die Galaxie in einem neuen Licht: Astronomie mit Gammastrahlen.
Schriesheim, Germany, Meeting of amateur astronomers, IAS, Vortrag (14.03.2015)
Gamma ray astronomy with Cherenkov Telescopes – from H.E.S.S. to CTA.
Santiago, Chile, Pontificia Universidad Católica de Chile, Colloquium (17.11.2015)
The quest for the most violent phenomena in the Universe.
Saclay, Paris, France, IRFU, CEA, Colloquium (06.02.2015)
Latest Results from H.E.S.S. and Status of CTA.
Geneva, Switzerland, CERN, AMS Days (17.04.2015)
The Galaxy in a New Light: Gamma-Ray Astronomy with Cherenkov Telescopes.
Pasadena, USA, Caltech, Colloquium (21.05.2015) and
Aachen, Germany, RWTH, Colloquium (15.06.2015)

Keitel, C. H.:

Extremely high-intensity laser interactions with fundamental quantum systems.
Bucharest, Romania, ELI-DC AISBL at Bucharest - Măgurele, invited lecture at the ELI-NP Summer School 2015 within the framework of ELI-DC AISBL (22.09.2015)

Kellerbauer, A.:

How to laser-cool negative ions?
London, UK, AMO Physics Seminar, University College (30.09.2015)

Kirk, J.G.:

The acceleration of cosmic rays.
Innsbruck, Austria, Department of Physics, University of Innsbruck (17.11.2015)

Krantz, C.:

Upcoming Experiments at the Heidelberg Cryogenic Storage Ring.
Gießen, Germany, Institut für Atom- und Molekülphysik, Universität (22.01.2015)

Kreckel, H.:

Experiments with molecular ions at MPIK: From Coulomb explosion of chiral molecules to the formation of water in space.
Hamburg, Germany, Center for free-Electron-Laser Science (CFEL) (05.11.2015)
Laboratory Astrophysics.
Rat Deutscher Sternwarten (RDS): Perspectives of Astrophysics in Germany 2015-2030 (09.12.2015)

Lindner, M.:

Are neutrinos their own antiparticles?
Münster, Germany, GRK2149 Retreat (26.11.2015)
Electroweak and conformal symmetry breaking.
Kanazawa, Japan, University (16.11.-19.11.2015)
The Evidence for Dark Matter and the Case for Direct Detection.

Assergi, Italy, LNGS Gran Sasso (11.11.2015)

EW symmetry breaking in the light of LHC data.

Amsterdam, The Netherlands, Colloquium at the Dutch national Seminar at NIKHEF (13.03.2015)

Dunkle Materie und die unsichtbare Welt der Geisterteilchen.

Mannheim, Germany, Eingeladener Vortrag beim Freundeskreis Planetarium (04.02.2015)

Longo, P.:

Classifying Superradiance in Extended Media.

Chisinau, Moldova, Institute of Applied Physics (Academy of Sciences of Moldova), Institute Seminar (29.09.2015)

Marrodán Undagoitia, T.:

Dark matter searches.

Bad Kreuznach, Germany, Annual retreat of the Graduate School „Symmetry Breaking“ (09.2015)

Dark matter searches with the XENON experiment.

München, Germany, Seminar E15 (01.06.2015)

Meuren, S.:

New aspects of loop diagrams in strong-field QED.

Plymouth, United Kingdom, Group seminar; School of Computing, Electronics and Mathematics; Plymouth University (30.06.2015)

Meyer, K.:

Signatures and control of strong-field dynamics on ultrashort time scales: from fundamental to complex systems.

Kassel, Germany, Research seminar ULTRA, Prof. Dr. Thomas Baumert (09.11.2015)

Mishra, P.M.:

Storing molecular ions in a cryogenic environment: The electrostatic storage ring CSR.

Kolkata, India, Indian Institutes of Science Education and Research (26.12.2015)

Oreshkina, N. S.:

Many-body calculations for highly charged ions in search towards the variation of fundamental constants.

Darmstadt, Germany, GSI Helmholtzzentrum für Schwerionenforschung, Atomic Physics Seminar (03.11.2015)

Pálffy-Buß, A.:

Broadband photon echoes for fast storage and control.

Darmstadt, Germany, Institut für Angewandte Physik, Technische Universität Darmstadt, Physikseminar (20.01.2015)

Nuclear quantum dynamics as a tool for high-precision studies.

Braunschweig, Germany, Technische Universität Braunschweig, Vorstellungskolloquium (14.01.2015)

Parsons, R.D.:

ImPACT Analysis and GRBs.

Zeuthen, Germany, Desy Seminar (18.03.2015)

Pfeifer, T.:

The ultrafast talk of two excited electrons: Listening, and then asking them physics questions.

Oxford, United Kingdom, Atomic and Laser Physics Seminar, University of Oxford (30.11.2015)

Der Tanz der Elektronen im Atom und Molekül, verfilmt und vertont mit intensiven Laserblitzen.

Mannheim, Germany, Physics Colloquium, Technical University of Mannheim (12.11.2015)

Rodejohann, W.:

Theoretical Motivation of Neutrinoless Double Beta Decay.

Tübingen, Germany, Eberhard-Karls-Universität Tübingen (19.06.2015)

Neutrino Mass and Lepton Mixing.

Freiburg, Germany, Albert-Ludwigs-Universität Freiburg (11.06.2015)

Theories of Neutrino Mass.

Heidelberg, Germany, Ruprecht-Karls-Universität Heidelberg (10.01.2015)

Schmelling, M.:

Physics Highlights from the LHCb Experiment.

Darmstadt, Germany, EMMI, GSI (22.07.2015)

Smirnov, A. Y.:

What's now and what's next?

Padova, Italy, Seminar at University (28.10.2015)

About Nobel prize in Physics 2015.

Trieste, Italy, Lecture at inauguration of the 2015 ICTP diploma program ICTP (21.10.2015)

Solar neutrinos: Status and perspectives.

Mainz, Germany, workshop Crossroads of Neutrino Physics (20.08.2015)

Lepton mixing from the Hidden sector.

Southampton, UK, University (29.05.2015)

Lepton mixing from the Hidden sector.

Heidelberg, Germany, University (21.05.2015)

Neutrinos: Normal or special?

Madrid, Spain, Institute of theoretical physics UAM (10.04.2015)

Smirnov, J.:

Phenomenology of conformal model building.

Munich, Germany, Max Planck Institute for Physics (13.05.2015)

Tuffs, R.J.:

The evolution of galaxies in the group environment.

Lancashire, UK, Seminar at the Jeremiah Horrocks Institute, University of Central Lancashire (23.01.2015)

The passage of light in spiral galaxies.

Durham, UK, Seminar at the Institute for Computational Cosmology, University of Durham (14.01.2015)

Versolato, O.:

Physics aspects of laser produced plasma EUV sources.

Amsterdam, The Netherlands, AMOLF colloquium (14.12.2015)

von Hahn, R.:

First operation of the Cryogenic electrostatic Storage Ring CSR.

Frankfurt, Germany, Seminar, Universität (11.12.2015)

Voss, H.:

Machine Learning and Multivariate Analysis Techniques.

Karlsruhe, Germany, Seminar für Teilchenphysik, (20.11.2015)

Invited Talks 2016

At Conferences and Symposia

Amsterdam, Netherlands, International Workshop on EUV and Soft X-ray Sources, ARCNL (08.11.2016)

Crespo López-Urrutia, J.R.:

Charge-state resolving analysis of EUV spectra using electron beam ion traps.

Andover, NH, USA, Proctor Academy, Multiphoton Processes – Gordon Research Conferences (19.06.-24.06.2016)

Moshammer, R.:

Ionization and Fragmentation in XUV and IR Laser Pulses.

Ott, C.:

Ultrafast Dynamics of Correlated Electrons – From Atoms to Solids.

Arosa, Switzerland, 4th European Conference on Trapped Ions (ECTI 2016) (29.08.-02.09.2016)

Blaum, K.:

Precision measurements of fundamental properties of atomic particles in Penning traps.

George, S.:

First Results from the Cryogenic Storage Ring CSR.

Athens, Greece, EWASS 2016, European Week of Astronomy and Space Science (04.07.-08.07.2016)

Hofmann, W.:

Status and prospects of gamma ray astronomy in the high energy and very high energy domain.

Autrans, France, IN2P3 School of Statistics 2016 (30.05.-23.06.2016)

Voss, H.:

Multivariate Analysis (Machine Learning) ... in HEP.

Bad Honnef, Bonn, Germany, 8th Bethe Center Workshop „Particle physics meets Cosmology“ (10.10.-14.10.2016)

Smirnov, A. Y.:

Status of Neutrino physics.

Bad Honnef, Bonn, Germany, KAT - Strategietreffen der Astroteilchenphysik (25.11.2016)

Lindner, M.:

Die Suche nach anderen seltenen Ereignissen (sterile Neutrinos, Axionen, coherent scattering).

Bad Honnef, Germany, 614th Heraeus-Seminar on Few-body Physics (18.04.-20.04.2016)

Moshammer, R.:

Atomic and Molecular Fragmentation Dynamics in Intense XUV and IR Laser Pulses.

Barcelona, Spain, University, IFAE (09.2016)

da Silva Queiroz, F.:

Dark Matter Overview.

Beijing, China, IHEP, CEPC-SPPC Workshop (08.04.-09.04.2016)

Ge, Shaofeng:

Higgs Coupling Precision and New Physics Scales @ CEPC.

Berkeley, California, USA, Workshop on High Energy Density Physics with BELLA-i (20.01.-22.01.2016)

Gunst, J.:

Laser-nucleus interaction with keV and MeV photons.

Meuren, S.:

From electron-Positron photoproduction in strong laser fields to QED cascades.

Berkeley-CA, USA, Strangeness in Quark Matter 2016 (26.06.-01.07.2016)

Schmelling, M.:

Highlights from the LHCb Ion Physics Program.

Blois, France, 28th Rencontres de Blois on “Particle Physics and Cosmology” (29.04.-03.06.2016)

Viana, A.:

Search for Galactic Pevatrons with H.E.S.S.

Bochum, Germany, Fall Meeting of the German Astronomy Society AG 2016 (12.09.-16.09.2016)

Rieger, F.M.:

Non-thermal Processes and the Physics of Relativistic AGN jets.

Bochum, Germany, Gaseous Electronics Conference (GEC) (10.10.-14.10.2016)

Dorn, A.:

Electron Impact Ionization and Fragmentation Dynamics of Small Atomic and Molecular Clusters.

Bormio, Italy, 54th International Winter Meeting on Nuclear Physics (25.01.-29.01.2016)

Schmeling, M.:

Heavy Ion Results from LHCb.

Braunschweig, Germany, Physikalisch Technische Bundesanstalt, Expert Panel: Metrology for Biological Radiation Effects (07.06.2016)

Dorn, A.:

Electron impact ionization of biomolecules as monomers and hydrated clusters.

Brisbane, Australia, Joint 13th Asia Pacific Conference and 22nd Australian Institute of Physics Congress (04.12.-08.12.2016)

Crespo López-Urrutia, J.R.:

Cold highly charged ions for highest precision spectroscopy.

Cargèse, Corsica, International Cargèse School on Astrophysical Jets (23.05.-01.06.2016)

Kirk, J.G.:

Astrophysical Particle Acceleration.

CERN, Geneva, Switzerland, Summer Student Lecture (18.07.-21.07.2016)

Voss, H.:

Introduction to probability and statistics.

CERN, Switzerland, 100th Plenary ECFA meeting (24.11.2016)

Lindner, M.:

The status of neutrino physics.

CERN, Switzerland, Workshop (08.2016)

da Silva Queiroz, F.:

Lessons from Dark Matter - Complementarity using LHC data.

Chicago, USA, 38th International Conference on High Energy Physics „ICHEP2016“ (03.08.-10.08.2016)

Hansen, R. S. L.:

How to make the short baseline sterile neutrino compatible with cosmology.

Rodejohann, W.:

Sterile Neutrino in Models.

Corfu, Greece, 16th Hellenic School and Workshop on Elementary Particle Physics and Gravity (31.08.-12.09.2016)

Lindner, M.:

Lectures on Detection of Dark Matter.

Daejeon, Korea, IBS Center for Theoretical Physics of the Universe, Light Dark World 2016 (11.07.-15.07.2016)

Lindner, M.:

Phenomenology of light sterile neutrinos.

Darmstadt, Germany, DPG-Frühjahrstagung "Hadronen und Kerne" 2016 (14.03.-18.03.2016)

Heissel, M.:

Performance of the LAr scintillation veto of Gerda Phase II.

Darmstadt, Germany, DPG-HK (14.03.-18.03.2016)

Atanasov, D.:

Recent results from the Penning-trap mass spectrometer ISOLTRAP.

Darmstadt, Germany, NUSTAR Annual Meeting (29.02.-04.03.2016)

Atanasov, D.:

Precision mass measurements of neutron-rich cadmium for r-process studies.

Dresden, Germany, International Workshop on Atomic Physics (27.11.-02.12.2016)

Bauke, H.:

Numerical approaches to tunneling times in strong-field ionization.

Ott, C.:

Ultrafast dynamics in the insulator-to-metal phase transition of vanadium dioxide measured by attosecond transient absorption spectroscopy.

Dresden-Rossendorf, Germany, Kolloquium "Theorie von Nichtgleichgewichtsphänomenen in Festkörpern oder Plasmen" (14.10.-15.10.2016)

Di Piazza, A.:

Test of Classical and Quantum Electrodynamics with Intense Laser Fields.

Pálffy-Buß, A.:

Nuclear and plasma physics with extreme light sources.

Dublin, Ireland, Contested Astrophysics Workshop (12.04.-14.04.2016)

Aharonyan F.A.:

The challenge of Extreme Accelerators.

Giacinti G.:

Do we understand the Cosmic Ray Anisotropy Data?

Hinton, J.:

Cosmic Ray impact; should the rest of the astrophysical community really care about cosmic rays?

East Lansing, Michigan, USA, The r-process nucleosynthesis: connecting FRIB with the cosmos (30.05.-17.06.2016)

Atanasov, D.:

The r-process nucleosynthesis studies at ISOLDE.

Edinburgh, Scotland, SPIE: Ground-based and Airborne Telescopes VI (26.06.-01.07.2016)

Hofmann, W.:

Very High Energy Gamma-Ray Astronomy with the Cherenkov Telescope Array.

Edinburgh, United Kingdom, XLIC Meeting (29.08.-30.08.2016)

Moshammer, R.:

Imaging and Control of Molecular Dynamics.

Frankenfels, Austria, DKPI Summer School (19.09.-23.09.2016)

Voss, H.:

Machine Learning - Multivariate Classification ... in HEP.

Frankfurt, Germany, 12th European Conference on Atoms Molecules and Photons (ECAMP12) (05.09.-09.09.2016)

Blaum, K.:

Precision measurements of fundamental properties of atomic particles in Penning traps.

Frankfurt, Germany, ECAMP (05.09.2016)

Versolato, O.:

Atomic processes in plasma sources for EUV nanolithography.

Frankfurt, Germany, NucAR Workshop (18.02.2016)

George, S.:

Precision mass spectroscopy for nuclear astrophysics.

Frascati, Italy, 18th LNF Spring School „Bruno Touschek“ in Nuclear, Subnuclear and Astroparticle Physics, (09.05.-13.05.2016)

Rodejohann, W.:

Neutrinoless Double Beta Decay: Theory.

Frascati, Italy, 6th Roma International Conference on AstroParticle Physics (21.06.-24.06.2016)

Zanin, R.:

The Crab pulsar at VHE.

Frascati, Italy, Selected puzzles in particle physics, Workshop (20.12.-22.12.2016)

Lindner, M.:

The 5 MeV bump in reactors antineutrino spectrum.

Geneva, Switzerland, CERN, TeV Particle Astrophysics 2016 (12.09.-16.09.2016)

Tibaldo, L.:

High-energy interstellar gamma-ray emission from the Milky Way.

Geneva, Switzerland, Physics Beyond Colliders Kickoff Workshop (06.09.-07.09.2016)

Blaum, K.:

Probing the Standard Model with Radionuclides.

Geneva, Switzerland, TeV Astroparticle Physics (TeVPA) conference at CERN (12.09.-16.09.2016)

Maneschg, W.:

First results from Phase II of the neutrinoless double beta decay experiment GERDA.

Hamburg, Germany, DPG Frühjahrstagung (29.02.-04.03.2016)

Almazán Molina, H.:

Calibration and neutron detection efficiency in Double Chooz.

Haser, J.:

The Reactor Antineutrino Anomalies.

Hofmann, W.:

Hochenergie-Gamma-Astronomie mit den H.E.S.S.- Teleskopen: der Himmel in einem neuen Licht. (Stern-Gerlach-Medaille Preisträgervortrag)

Lubashevskiy, A.:

Suppression of the background coming from 42Ar in the GERDA experiment.

Ohmer, S.:

Low Scale Unification @ LHC.

Roca Catalá, C.:

Sterile neutrino search in the Stereo Experiment.

Wagner, V.:

Status of GERDA Phase II.

Hannover, Germany, DPG Spring Meeting (29.02.-04.03.2016)

Kreckel, H.:

Laboratory studies of interstellar molecules: from the first molecules to complex organics in space.

Wolf, A.:

Physics with keV Ion Beams at the Cryogenic Storage Ring CSR.

Meyer, C.:

Rotational state thermometry of hydroxyl anions at the Cryogenic Storage Ring.

Sturm, S.:

Probing QED in strong fields via the magnetic moment of highly charged ions and its isotopic effect.

Heidelberg, Germany, 6th International Symposium on High Energy Gamma-Ray Astronomy (11.07.-15.07.2016)

Hofmann, W.:

CTA Status.

Rieger, F.M.:

Gamma-Rays from Non-blazar AGN.

Heidelberg, Germany, ASTERICS European Data Provider Forum (15.06.-16.06.2016)

Deil, C.:

Open data and tools for gamma-ray astronomy.

Heidelberg, MPIK, ExDaMA Meeting (12.10.2016)

Lindner, M.:

The Dark Matter Landscape.

Ischia, Italy, 10th Cosmic Ray International Seminar CRIS2016 (04.07.-08.07.2016)

Aharonian F.A. :

Probing Cosmic Accelerators.

Jena, Germany, Atomic Physics with (super) Heavy Atoms and Ions Workshop (26.10.2016)

Pálffy-Buß, A.:

Nuclear effects in heavy atoms and ions.

Jerusalem, Israel, International Conference on Precision Physics of Simple Atomic Systems - PSAS 2016 (22.05.-27.05.2016)

Harman, Z.:

Theory of the g-factor of highly charged ions.

Sturm, S.:

Probing QED in strong fields via the magnetic moment of highly charged ions.

Kamenice, Czech Republic, Workshop "Future of Ultrashort Pulses II" (16.09.-17.09.2016)

Ott, C.:

Attosecond Transient Absorption Spectroscopy – Measuring Dynamics of Correlated Electrons.

Kanazawa, Japan, 12th International Conference on Low Energy Antiproton Physics (06.03.-11.03.2016)

Blaum, K.:

Precision Atomic and Nuclear Masses and their Importance for Nuclear Structure, Astrophysics and Fundamental Studies.

Kazan, Russia, EXON 2016 (09.09.2016)

Eliseev, S.:

Penning-Trap Mass Spectrometry and Neutrino Mass.

Kielce, Poland, 18th Int. Conf. on the Physics of Highly Charged Ions (HCI) (12.09.-16.09.2016)

Shah, C.:

Strong higher-order resonant contributions to x-ray line polarization in hot plasmas.

Wolf, A.:

Cryogenic electrostatic storage rings for low-energy ion beams.

Knoxville, TN, USA, Neutrinos in Nuclear Physics Workshop (29.07.-31.07.2016)

Lindner, M.:

Lepton number violating decays: Theoretical and experimental challenges.

Krakow, Poland, SPARC Workshop (16.09.-20.09.2016)

Wolf, A.:

Gas-phase molecular astrophysics and storage-ring collision measurements.

La Thuile, Italy, Moriond 2016 Conference (08.2016)

da Silva Queiroz, F.:

Dark Matter Overview.

Ladek Zdroj, Poland, 52 Winter School and Winter Kindergarten of Theoretical Physics 2016 (14.02.-21.02.2016)

Akhmedov, E.:

Neutrinos on Earth and in the Heavens.

Neutrino oscillations in Quantum Mechanics and Quantum Field Theory.

Leiden, Netherlands, High Energy Astrophysical Model Comparison Workshop (08.08.2016)

Bennitt, S.:

What can and can't be measured.

Lisbon, Portugal, Initial Stages 2016 (23.05.-27.05.2016)

Blouw, J.:

Summary and news from LHCb.

Listvyanka, Russia, The Lake Baykal Three Messenger Conference (29.08.-03.09.2016)

Aharonian F.A.:

Exploring the Galactic PeVatrons with multi-TeV gamma rays, neutrinos and X-rays.

Liverpool, UK, AAP 2016 (01.12.-02.12.2016)

Haser, J.:

Investigating the Spectral Anomaly with Different Reactor Antineutrino Experiments.

London, UK, NuPhys2016 (12.12.-14.12.2016)

Buck, C.:

Sterile neutrinos: reactor experiments.

Lucca, Italy, Gordon Research Conference (GRC) on Photoionization & Photodetachment (07.02.-12.02.2016)

Pfeifer, T.:

Atomic and molecular resonances in short and strong fields above and below the ionization continuum.

Madrid, Spain, XMM-Newton 2016 Science Workshop: The Next Decade (09.05.-11.05.2016)

Hofmann, W.:

Synergies with CTA and VHE Astrophysics.

Mainz, Germany, Helmholtz Institut, MUTAG2016 (12.12.-13.12.2016)

Hinton, J.:

Status and perspectives of CTA.

Mainz, Germany, University, Dark Matter in the Milky Way (2016)

da Silva Queiroz, F.:

Are we ever going to determine the quantum numbers of the dark matter particle Dark Matter in the Milky Way?

Malaga, Spain, Blazars through Sharp Multi-Wavelength Eyes (30.05.-03.06.2016)

Kirk J.G.:

Particle acceleration in magnetically dominated jets.

Menlo Park, California, USA, SLAC XFELO Science Workshop (29.06.-01.07.2016)

Evers, J.:

Is strong excitation feasible in ensembles of Mößbauer nuclei?

Pálffy-Buß, A.:

Perspectives on XFELO driving atomic nuclei.

Moscow region, Russia, 19th International Moscow School of physics/ 44th ITEP Winter School (16.02.-22.02.2016)

Smirnov, A. Y.:

Neutrino physics: Selected topics.

Moscow, Russia, ISVHECRI 2016 (22.08.-27.08.2016)

Dembinski, H.:

Investigating cosmic rays and air shower physics with IceCube/IceTop.

Moscow, Russia, The 2nd International Conference on Particle Physics and Astrophysics (10.10.-14.10.2016)

Schwingenheuer, B.:

Neutrinoless double beta decay with Ge-76.

Neunkirchen, Germany, Structure and Dynamics of Atoms and Molecules (SDAM) Workshop (26.06.-29.06.2016)

Blaum, K.:

The future of ultra-high precision – Precision tests with cooled and stored exotic ions, Structure and Dynamics of Atoms and Molecules.

Dorn, A.:

Electron collisions: from He to Bio Molecules.

Keitel, C. H.:

Ultra-intense lasers.

Kellerbauer, A.:

Cooling antiprotons to test gravity.

Moshammer, R.:

Intense Lasers: what to learn from momenta.

Wolf, A.:

First experiments at the CSR.

Nizhny Novgorod, Russia, The VI International conference "Frontiers of Nonlinear Physics (FNP 2016)" (17.07.-23.07.2016)

Keitel, C. H.:

High-energy quantum dynamics with very intense laser pulses.

Obergurgl, Austria, LHCSki 2016 (10.04.-15.04.2016)

Ohmer, S.:

Low Scale Unification @ LHC.

Odense, Denmark, 1st Danish Astroparticle Physics Meeting (05.10.-06.10.2016)

Hansen, R. S. L.:

The short baseline sterile neutrino and cosmology.

Orsay, France, LAL, IPA, Interplay between Particle and Astroparticle Physics (05.09.-09.09.2016)

Lindner, M.:

Overview talk.

Otranto, Italy, Neutrino Oscillation Workshop (04.09.-11.09.2016)

Buck, C.:

Double Chooz results.

Padova, Italy, SIF Annual National Congress (26.09.-30.09.2016)

Di Piazza, A.:

Intense laser-plasma interaction as a tool for fundamental physics.

Palo Alto, USA, 11th International Conference on High Energy Density Laboratory Astrophysics (16.05.-20.05.2016)

Kirk J.G.:

Strong waves in astrophysics and the laboratory.

Paris, France, 51st Rencontres de Moriond, Electroweak Interactions and Unified Theories (12.03.-19.03.2016)

Hasterok, C.:

Status of Direct Dark Matter Search with XENON100 and XENON1T.

Paris, France, APPEC Town Meeting (06.04.2016)

Aharonian F.A.:

High Energy Universe: Gamma Rays.

Paris, France, Beyond a PeV: particle acceleration to extreme energies in cosmic source (13.09.-16.09.2016)

Aharonian F.A.:

Hard X-rays as distinct signatures of PeVatrons.

Kirk, J.G.:

Particle acceleration in magnetically dominated, relativistic jets.

Rieger, F.M.:

The relevance of particle acceleration in AGN jets on different scales.

Liu, R.:

Shear acceleration in large scale AGN jets.

Paris, France, Sources of Galactic Cosmic Rays Workshop (07.12.-09.12.2016)

Aharonian F.A.:

Theoretical understanding of the origin of Galactic Cosmic Rays. (Summary)

Giacinti, G.:

TeV-PeV Cosmic Ray Anisotropy and Statistical Properties of the Interstellar Turbulence.

Yang, R.:

Radial distribution of the diffuse gamma-ray emissivity in the galactic disk.

Poznan, Poland, X International Workshop Application of lasers and storage devices in atomic nuclei research (16.05.-19.05.2016)

Eliseev, S.:

Penning-Trap Mass Spectrometry and Neutrino Mass.

Sturm, S.:

High-precision measurement of the isotope effect in the magnetic moment of highly charged ions and the AL-PHATRAP experiment

Puebla, Mexico, Workshop on a wide field-of-view gamma-ray observatory in the Southern Hemisphere TeV gamma ray observatory (10.11.-12.11.2016)

Schoorlemmer, H.:

Fundamental drivers for the design of a ground-particle based gamma-ray observatory.

López Coto, R.:

Astrophysical motivations for the construction of a wide FoV gamma-ray observatory in the southern hemisphere.

Puerto de La Cruz, Spain, Hadronic Contributions to New Physics Searches (09.2016)

da Silva Queiroz, F.:

Dark Matter Overview.

Quy Nhon, Vietnam, PASCOS 2016: 22nd International Symposium on Particles, Strings and Cosmology, XIIth Rencontres du Vietnam (10.07.-16.07.2016)

Lindner, M.:

Summary and perspectives: Neutrino and precision measurements.

Lubashevskiy, A.:

Neutrinoless double beta decay: First results of GERDA Phase II and the status of other experiments.

Riezlern, Austria, 37th EAS Meeting "Extreme Atomic Systems" (14.02.-19.02.2016)

Cavaleotto, S. M.:

Control of strong-field excited systems in optical and x-ray spectra.

Dorn, A.:

Young-type interferences in electron impact ionization ($e,2e$) of aligned H₂ molecules.

Oreshkina, N. S.:

X-ray fluorescence spectrum of the astrophysically relevant highly charged Fe ions driven by strong free-electron-laser fields.

Ringberg, Germany, 7th Ringberg Workshop on Science with FELs (10.02.2016)

Crespo López-Urrutia, J.R.:

Hyperfine studies and FEL physics with sympathetically cooled ions.

Ringberg, Germany, Workshop on Laboratory Astrophysics (28.09.-30.09.2016):

Meyer, C.:

Rotational cooling of CH⁺ and OH⁻ at the Cryogenic Storage Ring.

Rio de Janeiro, Brazil, workshop "2nd LATTES Meeting" (14.03.-15.03. 2016)

Aharanian F.A.:

Scientific objectives of ground-based gamma-ray detectors.

Rome, Italy, 6th Rome International Conference on Astroparticle Physics (21.06.-24.06.2016)

da Silva Queiroz, F.:

On Fermi-LAT, H.E.S.S. and the Cherenkov Telescope Array Sensitivity to Dark Matter Annihilation.

Rome, Italy, 7th Workshop on Air Shower Detection at High Altitude (30.11-02.12.2016)

Casanova, S.:

Gamma-Ray Astronomy with IACTs.

Rome, Italy, AGILE 14th Science Workshop (20.06.-21.06.2016)

Casanova, S.:

Results of the first year of the HAWC observatory.

Rome, Italy, Ricap2016 (20.06.-24.06.2016)

Zanin, R.:

The Crab pulsar at VHE.

Casanova, S.:

Highlights from HAWC.

Rome, Italy, workshop "Towards a large field-of-view TeV experiment" (14.01.-15.01.2016)

Aharanian F.A.:

Evidence for a PeVatron in the Galactic Center: is it Sgr A?*

Russbach, Germany, 3rd Russbach School on Nuclear Astrophysics (10.03.2016)

Kreim, S.:

Precision mass measurements for nuclear astrophysics.

Salt Lake City, USA, APS April Meeting (16.04.-19.04.2016)

Rodejohann, W.:

Interpretations of Neutrinoless Double Beta Decay.

Schwingenheuer, B.:

Neutrinoless double beta decay experiments.

Sao Paulo, Brazil, 12th International Colloquium on Atomic Spectra and Oscillator Strengths for Astrophysical and Laboratory Plasmas (04.07.2016)

Bennitt, S.:

Highly charged iron at ultrabrilliant light sources.

São Paulo, Brazil, Federal University of ABC (08.2016)

da Silva Queiroz, F.:

Highlights on Dark Matter Searches.

São Paulo, Brazil, Xth International Conference on the Interconnection between Particle Physics and Cosmology (11.06.-15.06.2016)

Heisel, M.:

First results from Gerda Phase II.

Seattle, USA, (PyAstro16) University of Washington, Python in Astronomy 2016 (21.03.-25.03.2016)

Deil, C.:

Python for gamma-ray astronomy.

Sexten, Italy, Astrophysics of Dark Matter (22.02.-26.02.2016)

Lindner, M.:

Dark Matter Candidates and Physics Beyond the Standard Model.

Sheffield, UK, International Conference on the Identification of Dark Matter (IDM) 2016 (18.07.-22.07.2016)

Haser, J.:

Light sterile neutrino search with reactor experiments.

Rauch, L.:

XENON100 run combination results.

Singapore, Singapore, EMN Light-Matter Interactions Meeting 2016 (10.05.-13.05.2016)

Gunst, J.:

Direct and secondary nuclear excitation with the XFEL.

Li, J.:

Generation of ultrashort gamma-ray pulses by high-intensity laser interacting with relativistic electron beam.

Pálffy-Buß, A.:

Laser-nucleus reactions.

Tamburini, M.:

Laser-pulse-shape control of seeded QED cascades.

Snowbird, USA, The 46th Winter Colloquium on the Physics of Quantum Electronics (PQE-2016) (03.01.-08.01.2016)

Evers, J.:

Design and Control of Quantum Optical Schemes at X-Ray Energies.

Pálffy-Buß, A.:

Bridging X-Ray and Optical Photons in an Opto-Mechanical Interface.

South Bend, USA, JINA-CEE Frontiers (29.03.-31.03.2016)

George, S.:

Nuclear astrophysics with rings and traps.

St. Petersburg, Russia, Workshop on Accretion Processes in Cosmic Sources (04.09.-10.09.2016)

Zanin, R.:

High-energy emission from accreting binary systems.

Accreting binaries at HE and VHE.

State College, PA, USA, MACROS 2016 Workshop (20.06.-22.06.2016)

Giacinti, G.:

Supernovae as PeVatrons.

Stockholm, Sweden, 2nd meeting on the Energetic Processing of Large Molecules (EPoLM2) (11.04.-13.04.2016)

Kreckel, H.:

Laboratory experiments on gas phase formation and destruction processes of interstellar molecules.

Mishra, P. M.:

Photoexcitation spectroscopy of biomolecules in the Cryogenic Storage Ring.

Sunibel Island, Florida, Fission and Properties of Neutron-rich Nuclei (ICFN6) (06.11.-12.11.2016)

Blaum, K.

Recent advances in high-precision nuclear mass measurements at ISOLTRAP at ISOLDE/CERN.

Sydney, Australia, 13th International Symposium on Cosmology and Particle Astrophysics (CosPA 2016) (28.11.-02.12.2016)

Lindner, M.:

Overview talk.

Tel Aviv-Yafo, Israel, Conference on High Intensity Lasers and attosecond science in Israel (CHILI2016) (22.02.-24.02.2016)

Keitel, C. H.:

High-energy quantum processes in extremely strong laser pulses.

Thessaloniki, Greece, 12th International Conference "Quark Confinement and the Hadron Spectrum" (29.08.-03.09.2016)

Rodejohann, W.:

Neutrinoless Double Beta Decay and Particle Physics.

Tokyo, Japan, ARIS 2014 (01.06.-06.06.2014)

Kreim, S.:

Answering Questions of Nuclear and Astrophysics with Mass Measurements from ISOLTRAP.

Tokyo, Japan, Symposium for exploring prospective research: Pioneering New Fields: Forefront of RIKEN's Science and Beyond (21.11.-22.11.2016)

Blaum, K.:

Probing the Standard Model with highest precision using stored exotic particles at ultralow energies.

Tomsk, Russia, International Workshop on Strong Field Problems in Quantum Theory (06.06.-11.06.2016)

Di Piazza, A.:

Recollision processes in strong-field QED.

Torino, Italy, 7th Workshop on Air Shower Cetection at high Altitude (30.11.-02.12.2016)

Schoorlemmer, H.:

Physical Drivers for a design of a High Altitude Observatory.

Torino, Italy, XXV European Cosmic Ray Symposium (04.09.-09.09.2016)

Tibaldo, L.:

Space based gamma-ray astronomy: new results, new frontiers, new horizons.

Schoorlemmer, H.:

Observing the TeV Gamma-Ray Sky with the High-Altitude Water Cherenkov Observatory.

Toyama, Japan, Symposium devoted to 20th anniversary of SuperKamiokande (17.06.2016)

Smirnov, A. Y.:

Theoretical significance of the SuperKamiokande results.

Trento, Italy, ECT* Workshop „Determination of the absolute electron (anti)neutrino mass“ (04.04.-08.04.2016)

Eliseev, S.

Penning-Trap Mass Spectrometry and Neutrino Mass.

Rodejohann, W.:

Theory and Phenomenology of Neutrino Mass.

Ulsan, South Korea, 1st Science at XFEL Meeting, UNIST (23.09.2016)

Crespo López-Urrutia, J.R.:

X-ray astrophysics and high-temperature plasma diagnostics: Opportunities with X-FEL radiation.

University Park-PA, USA, Center for Particle and Gravitational Astrophysics –PennState College, Multi-messenger Approaches to Cosmic Rays: Origins and Space Frontiers (MACROS) 2016 (20.06.-22.06.2016)

Viana, A.:

The very-high energy gamma-ray emission of the Galactic Centre with the H.E.S.S. telescope array.

Valencia, Spain, Planck2016 Conference (23.05.-27.05.2016)

Yaguna Toro, C. E.:

Gamma-ray limits on neutrino lines from Dark Matter annihilation.

Vienna, Austria, IAEA Technical Meeting on Uncertainty Assessment and Benchmark Experiments for Atomic and Molecular Data for Fusion Applications (19.12.-21.12.2016)

Wolf, A.:

Storage-Ring Merged Beams Experiments on Electron-Ion Recombination: Benchmarking and Accuracy Limits.

Villigen, Schweiz, Muonic Atom Spectroscopy Workshop (21.10.2016)

Blaum, K.:

Nuclear charge radii measurements by collinear laser spectroscopy and Penning trap g-factor experiments.

Villigen, Schweiz, PSI2016 Workshop (16.10.-20.10.2016)

Blaum, K.:

Precision measurements of fundamental properties of atomic particles in Penning traps.

Vulcano Island, Sicily, Italy, Vulcano Workshop 2016: Frontier Objects in Astrophysics and Particle Physics (22.05.-28.05.2016)

Giacinti, G.:

Particle Acceleration at Supernova Remnants and Supernovae.

Smirnov, A. Y.:

Overview on Neutrino physics.

Warsaw, Poland, 138th ESO Council Meeting (07.06.-08.06.2016)

Hinton, J.:

CTA Science.

Waterloo, Canada, Perimeter Institute, University of Waterloo, Feedback over 44 orders of magnitude: from Gamma-rays to the Universe (14.03.-16.03.2016)

Hinton, J.:

The Basics of the Gamma-ray Sky: current observational status and future perspectives.

Yerevan, Armenia, The 25th International Laser Physics Workshop (LPHYS'16) (11.07.-15.07.2016)

Di Piazza, A.:

Nonlinear single Compton scattering of an electron wave-packet (Seminar 2).

Nonlinear neutrino-photon interactions inside strong laser pulses (Symposium).

Hatsagortsyan, K. Z.:

Time-Resolved Photoelectron Holography in Weakly Relativistic Regime (Seminar 2).

Attosecond Gamma-Rays via Nonlinear Compton Scattering in the Radiation Dominated Regime (Symposium).

Keitel, C. H.:

Tailoring superradiance to design artificial quantum systems (Seminar 1).

Relativistic quantum dynamics in very intense laser pulses (Seminar 2).

Strong-field QED: From Pair Production and Vacuum Colliders to Control of Seeded QED Cascades (Symposium).

Pálffy-Buß, A.:

Direct and secondary nuclear excitation with x-ray free-electron lasers.

Zakopane, Poland, Zakopane Conference on Nuclear Physics „Extremes of the Nuclear Landscape” (28.08.-04.09.2016)

Blaum, K.:

High-precision nuclear mass measurements and recent trends in Penning-trap mass spectrometry.

At Other Institutes

Aharonian, F.A.:

Discovery of a PeVatron in the Galactic Center: Implications for the Physics of Black Holes.
Rio de Janeiro, Brazil, Centro Brasileiro de Pesquisas Fisicas – CBPF (23.03.2016)

Akhmedov, E.:

Another look at collective neutrino oscillations.
Dortmund, Germany, Dortmund University seminar (04.02.2016)

Barkov, M.:

Rapid TeV and GeV Variability in AGNs as Result of Jet-Star.
Munich, Germany, Max-Planck-Institut für Physik (27.06.2013)

Bekker, H.:

Spectroscopy of highly charged ions near the 4f-5s level crossing.
Darmstadt, Germany, GSI atomic physics colloquium (28.06.2016)

Blaum, K.:

Gefangen auf Ewigkeit – Vom Elektron und Proton zum kosmischen Antimaterie-Rätsel.
Bad Kreuznach, Germany, Öffentlicher Vortrag, Sternwarte (29.01.2016) and
Hargesheim, Germany, Alfred-Delp-Schule (05.04.2016)
Wie Gold entsteht – oder: Warum ist Eisen häufiger als Gold.
Mannheim, Germany, Öffentlicher Vortrag, Planetarium (10.02.2016)
Nuclear physics at the precision frontier.
Darmstadt, Germany, Festkolloquium anlässlich der Preisverleihung der GSI Exotic Nuclei Community der GSI Exotic Nuclei Community (03.03.2016)
Fundamental tests of nature with cooled and stored exotic ions.
Villigen, Schweiz, Paul Scherrer Institut (PSI) (17.03.2016) and
Singapore, Centre for Quantum Technologies (14.04.2016) and
Mainz, Germany, PRISMA Colloquium and GRK Seminar, Institut für Physik, Johannes Gutenberg-Universität (20.04.2016) and
TX, USA, Texas A&M University (24.05.2016) and
Austin, USA, University (26.05.2016) and
Gothenburg, Sweden, Lise Meitner Symposium on Physics with Radioactive Beams - In honor of reception of the Gothenburg Lise Meitner Award 2016 (28.-29.09.2016) and
Jülich, Germany, Forschungszentrum Jülich (01.12.2016) and
MI, USA, University of Notre Dame (07.12.2016) and
Grenoble, France, Institut Laue-Langevin (ILL) Colloquium series (28.11.2016)
Precision Measurements of Atomic Properties in Penning Traps, lecture within the ring lecture.
Heidelberg, Germany, AMO Physics in Heidelberg", Kirchhoff-Institute for Physics (29.04.2016)
Precision tests of fundamental interactions and their symmetries with cooled and stored exotic ions, GSI/FAIR-Colloquium 2016.
Darmstadt, Germany, Helmholtzzentrum für Schwerionenforschung (03.05.2016) and
Karlsruhe, Germany, Karlsruhe Institute of Technology (12.07.2016)
Das kosmische Antimaterie-Rätsel.
Frankfurt, Germany, Öffentlicher Vortrag AtelierFrankfurt (23.09.2016)

Buck, C.:

Neutrino Oszillationen: Die Verwandlungskunst der Geisterteilchen.
Mannheim, Germany, FH Mannheim (24.05.2016)

Casanova, S.:

The search for PeVatrons.
Merate, Italy, INAF Merate (23.05.2016)
Results of the first year of the HAWC observatory.
Pisa, Italy, University of Pisa-INFN (30.08.2016)

Cavaletto, S. M.:

Deterministic strong-field quantum control.
Zurich, Switzerland, ETH Zurich, Internal group seminar (10.11.2016)

Crespo López-Urrutia, J.R.:

Las líneas prohibidas del espectro solar.

Oviedo, Spain, Physics Seminar, Oviedo University (10.03.2016)
Nos hace falta saber si los átomos son imperturbables?
Oviedo, Spain, divulgation talk TEDx Oviedo 2016 (12.03.2016)
Highly charged ions for probing the time variation of fundamental constants.
Vienna, Austria, Seminar at Stefan-Meyer-Institut, Österreichische Akademie der Wissenschaften (30.03.2016) and
Heidelberg, Germany, CQD-Kolloquium, University of Heidelberg (20.04.2016) and
Freiburg, Germany, Physikkolloquium, University of Freiburg (09.05.2016)
X-ray signatures of hot atomic matter.
Heidelberg, Germany, Advanced Seminar on Condensed Matter Physics, University of Heidelberg (13.05.2016)

da Silva Queiroz, F.:

Highlights on Indirect Dark Matter Detection.
Campinas, Brazil, UNICAMP (08.2016)
Highlights on Dark Matter Searches.
Campinas, Brazil, UNICAMP (05.2016)
Probing the Nature of Dark Matter with Dwarf Galaxies.
Oslo, Norway, Oslo University (10.2016)
Are we ever going to determine the quantum numbers of the dark matter particle?
Mainz University, Germany, Workshop (05.2016)

Deil, C.:

Galaktische Gammaastronomie.
Heidelberg, Germany, Haus der Astronomie, Vortragsreihe: Faszination Astronomie (10.03.2016)

Dembinski, H.:

The cosmic ray flux and its chemical composition: a new perspective and latest results from IceCube.
Karlsruhe, Germany, IKP KIT, Cosmic Ray Seminar (02.11.2016)

Di Piazza, A.:

Modern aspects of strong-field QED in intense laser fields.
Moscow, Russia, National Research Nuclear University MEPhI, invited lecture at the International School for young scientists "Visions in Fundamental Physics" (12.12.2016)
Testing classical and quantum electrodynamics with intense laser fields.
Düsseldorf, Germany, Heinrich Heine University Düsseldorf, Institut für Theoretische Physik I, Physics Colloquium (08.12.2016) and
Darmstadt, Germany, GSI Helmholtzzentrum für Schwerionenforschung, Atomic Physics Seminar (14.06.2016) and
Palermo, Italy, University of Palermo, Physics Colloquium (10.05.2016)
Ultra-high intensity laser-plasma interaction.
Prague, Czech Republic, invited lecture at the ELI Beamlines and HiLASE Summer School (ELISS 2016) (25.08.2016)
Conceptual novelties and issues in constructing a relativistic quantum theory.
Palermo, Italy, University of Palermo, Seminar on Logic and Philosophy of Science (11.05.2016)

Dorn, A.:

Electron impact ionization of atoms molecules and small clusters.
Rolla, MS, USA, Missouri University of Science and Technology (10.11.2016)

Evers, J.:

X-ray quantum optics with Mößbauer nuclei.
Tübingen, Germany, University of Tübingen, Physics Colloquium (09.06.2016)

Feuerstein, B.:

Tornado- und Schwergewitterforschung.
Heidelberg, Germany, Deutsches Krebsforschungszentrum, Heidelberger Life-Science Lab, Eröffnungsvortrag (24.09.2016)

Ge, Shaofeng:

The Leptonic Dirac CP Phase from Residual Symmetry and Muon Decay at Rest Experiment.
Beijing, China, Institute of High Energy Physics, Theory Division (25.07.2016)
Measuring the Leptonic Dirac CP Phase with Muon Decay at Rest.
Beijing, China, Tsinghua University, Center for High Energy Physics, Academy Forum (14.07.2016)
Neutrino Dirac CP Phase with Residual Symmetries and μ DAR Experiments.
Mainz, Germany, Johannes Gutenberg University, Seminar THEP (21.06.2016) and
Tianjin, China, Nankai University (31.03.2016)

Higgs Precision Combination, New Physics Scales via Dimension-Six Operators, and Differential Distributions at CEPC.

Beijing, China, CEPC Software Workshop, IHEP (26.03.2016)

New Physics Scales to be Probed at Lepton Colliders (CEPC).

Hong-Kong, China, IAS Program on High Energy Physics, Hong-Kong University of Science and Technology (11.01.2016)

Neutrino Dirac CP Phase with Residual Symmetries and μ DAR Experiments.

IAS Program on High Energy Physics, Hong-Kong University of Science and Technology, China (05.01.2016)

Possible Extensions of JUNO – CP and Effect on $0\nu2\beta$ Decay.

Shanghai, China, East China University of Science and Technology (04.01.2016)

Hansen, R. S. L.:

Averaging the oscillations of supernova neutrino oscillations.

Mainz, Germany, JGU Mainz (08.11.2016)

Harman, Z.:

100 Jahre Sommerfeldsche Feinstrukturkonstante - Warum Präzisionsbestimmungen?

Leipzig, Germany, Leipzig University / Arnold-Sommerfeld-Gesellschaft e.V., Sommerfeld-Seminar (24.11.2016)

Haser, J.:

Reactor Neutrino Spectra: Anomalies and Perspectives.

Tübingen, Germany, Eberhard Karls Universität Tübingen, Seminarvortrag (13.06.2016)

Hinton, J.:

The Cherenkov Telescope Array: a major new astronomical facility.

Bonn, Germany, Max-Planck-Institut für Radioastronomie, Main Colloquium (02.09.2016)

Hofmann, W.:

Die Galaxie in einem neuen Licht: Astronomie mit Gammastrahlen.

Mannheim, Germany, Planetarium, Reihe: Astronomie am Nachmittag (02.03.2016) and

Rüsselsheim, Germany, Hochschule Rhein/Main, VHS Reihe: Die Geschichte des Lichts im Universum (15.04.2016) and

Heppenheim, Germany, Starkenburg-Sternwarte e.V. Heppenheim (26.04.2016) and

Erlangen, Germany, Orangerie, Öffentlicher Abendvortrag (21.09.2016) and

Madrid, Spain, Fundación BBVA, Palacio del Marqués de Salamanca, Öffentlicher Abendvortrag (22.11.2016)

The Galaxy in a New Light: Gamma-Ray Astronomy with Cherenkov Telescopes.

Kiel, Germany, Colloquium (07.06.2016) and

Rehovot, Israel, Weizmann Institute of Science, Symposium on Astrophysics and Astroparticles (06.11.2016)

Very High Energy Gamma Ray Astronomy with the H.E.S.S. Telescopes: The Sky in a New Light.

Irvine, USA, University of California, Irvine, Yodh Prize Colloquium (09.04.2016)

Keitel, C. H.:

Quantum optics at high energies and high frequencies.

Ulm, Germany, Ulm University, Physikalisches Kolloquium (11.01.2016)

Kellerbauer, A.:

Laser cooling negative ions for antimatter experiments.

Atomic Physics Seminar, GSI, Darmstadt, Germany (19.07.2016)

High-precision studies with antihydrogen at CERN.

Bonn, Germany, Experimental Particle Physics Seminar, University of Bonn (11.10.2016)

Kreckel, H.:

Experiments on fundamental properties of molecular ions: From the formation of the first stars to Coulomb explosion of chiral molecules.

Kassel, Germany, Kolloquium at Kassel University (16.06.2016)

Lindemann, S.:

Direct Dark Matter Search with XENON100 and XENON1T.

Heidelberg, Germany, Universität Heidelberg, Colliding Pizza Seminar (20.06.2016)

Lindner, M.:

Dunkle Materie oder was zu Neutrinos.

Basel, Switzerland, Kolloquium an der Universität Basel (09.12.2016)

The dark Side of the Universe.

Sydney, Australia, Invited public lecture, University of Sydney (29.11.2016)

Conformal Electro-Weak Symmetry Breaking and Implications for Neutrinos and Dark Matter.

Golm, Germany, Max-Planck-Institut für Gravitationsphysik (Albert Einstein Institut) (23.03.2016)

Majorana and sterile neutrinos: Theory and experimental searches.

Seoul, South Korea, Lectures at the KIAS/KNRC School on Neutrino Physics (15.02.-17.02.2016)

López Coto, R.:

The non-thermal universe at the highest energies with the Imaging Atmospheric Cherenkov Technique.

Mexico City, Mexico, UNAM, Seminar (19.01.2016)

Latest results and future of the wide Field of View gamma-ray astronomy.

Washington, USA, Goddard Space Flight Center, Seminar (30.06.2016)

Maneschg, W.:

Neutronen in der Astroteilchenphysik: Neutronen-Messungen für das CONUS Projekt zum Nachweis der kohärenten Neutrino-Kern Streuung.

Braunschweig, Germany, Physikalisch-Technische Bundesanstalt (23.09.2016)

Marandon, V.:

A decade of HESS Galactic Plane Survey.

Montpellier, France, LUPM, Laboratoire Univers et Particules de Montpellier (22.11.2016)

Marrodán Undagoitia, T.:

Direct searches for dark matter.

Münster, Research Training Group Weak and Strong Interactions - from Hadrons to Dark Matter (12.02.2016)

Meuren, S.:

Probing nonperturbative electroweak processes with ultra-strong laser fields.

Heidelberg, Germany, Institute for Theoretical Physics, Heidelberg University, group seminar of Prof. Jürgen Berges (06.07.2016)

Probing nonlinear QED with strong laser fields.

Stanford, USA, Stanford Synchrotron Radiation Lightsource (SLAC), Photon Science Seminar (20.01.2016)

Nonlinear quantum electrodynamics in strong laser fields: From basic concepts to electron-positron photoproduction.

Princeton, USA, Princeton Plasma Physics Laboratory (PPPL), Theory seminar (14.01.2016)

Electron-Positron Photoproduction in Strong Laser Fields.

Düsseldorf, Germany, Heinrich Heine University Düsseldorf, Institut für Theoretische Physik I, Seminarvortrag (07.01.2016)

Mishra, P.M.:

Photo excitation experiments with cold biomolecular ions inside electrostatic cryogenic storage ring CSR.

Kolkata, India, Saha Institute of Nuclear Physics, (06.01.2016)

Moshammer, R.:

Coincidence Experiments with Atoms and Molecules in Intense XUV and IR Laser Fields.

Berlin, Germany, Colloquium, Max Born Institute (MBI) (11.05.2016)

Novotný, O.:

First experiments with the cryogenic electrostatic storage ring CSR.

Giessen, Germany, HIC-for-FAIR colloquium (08.12.2016)

Ohmer, S.:

Gravitational Waves as a New Probe of Bose-Einstein Condensate Dark Matter.

Heidelberg, Germany, Seminar of ITP Heidelberg University (22.11.2016)

Pálffy-Buß, A.:

Nuclear processes in hot and cold plasmas.

Darmstadt, Germany, GSI Helmholtzzentrum für Schwerionenforschung, Plasma Physics Seminar (14.06.2016)

Laser-nucleus reactions in coherent gamma-ray fields.

Bucharest, Romania, University of Bucharest, Physics Seminar (06.04.2016)

Quantum control of x-rays.

Erlangen, Germany, Institute for Theoretical Physics, University of Erlangen-Nuremberg, Theory Colloquium (12.01.2016)

Parsons, R.D.:

ImPACT: High Performance Event Reconstruction for H.E.S.S. and CTA.

Erlangen, Germany, ECAP Seminar (05.11.2016)

Pfeifer, T.:

Fundamental dynamics of small quantum systems probed and controlled by low and high frequency (laser) interactions.

Zürich, Switzerland, Laser Physics Seminar, ETH Zürich (25.01.2016)

Rieger, F.M.:

Gamma-Ray Astrophysics from Galaxies to Black Holes.

Heidelberg, Germany, ARI Kolloquium, University Heidelberg (21.01.2016)

Rodejohann, W.:

Theory and Phenomenology of Neutrino Mass.

Münster, Germany, Westfälische Wilhelms-Universität Münster (27.06.2016)

Schmelling, M.:

Studies of Forward Particle Production with LHCb.

Bochum, Germany, Ruhr-Universität Bochum, RAPP Center Inauguration (21.-23.09.2016)

Schwingenheuer, B.:

Neutrinoless double beta decay searches with Ge-76.

Stockholm, Sweden, Oscar Klein Center, Stockholm University, Colloquium (26.01.2016) and

Gothenburg, Sweden, Chalmers University of Technology, Seminar (27.01.2016) and

Köln, Germany, Universität Köln, Seminar (07.03.2016) and

Zürich, Switzerland, Universität Zürich, Seminar (09.03.2016) and

Aarhus, Denmark, Aarhus University, Colloquium (09.03.2016) and

Chicago, USA, University of Chicago, Seminar (19.04.2016) and

Dortmund, Germany, Universität Dortmund, Colloquium (03.05.2016) and

Darmstadt, Germany, (GSI)Gesellschaft für Schwerionenforschung, Colloquium (17.05.2016) and

Amsterdam, The Netherlands, NIKHEF, Colloquium (20.05.2016) and

Hamburg, Germany, DESY, Seminar (07.06.2016) and

Zeuthen, Germany, DESY, Seminar (08.06.2016) and

Rehovot, Israel, Weizmann Institute of Science, Seminar (22.06.2016) and

Berlin, Germany, Humboldt-Universität zu Berlin, Institut für Physik, Colloquium (28.06.2016) and

Bologna, Italy, University of Bologna, Seminar (15.07.2016) and

Dubna, Russia, JINR, Seminar (05.09.2016) and

Freiburg, Germany, Universität Freiburg, Seminar (26.10.2016) and

Heidelberg, Germany, Universität Heidelberg, Particle Colloquium (22.11.2016) and

Münster, Germany, Universität Münster, Seminar (16.12.2016)

Smirnov, A. Y.:

Bottom-up: from neutrino mixing to physics at the Planck scale.

Cambridge University, UK, HEP-GR Colloquium, DAMTP (02.11.2016)

Solar neutrinos: oscillations or no-oscillations?

Hamburg, Germany, WPC Colloquium 2016, Wolfgang Pauli Center, DESY (11.07.2016)

Neutrino masses: a message from the Hidden world.

Bern Switzerland, Lecture at the ceremony of the Einstein medal award, University of Bern (09.06.2016)

Oscillations, no-oscillations and neutrino mass.

Lausanne, Switzerland, Seminar at Lausanne University (06.06.2016) and

Karlsruhe, Germany, Lecture at Karlsruher Institut für Technologie (KIT), (04.02.2016) and

Brussels, Belgium, Solvay colloquium, at the Institut Solvay (26.01.2016)

Smirnov, J.:

Light from Dark Matter.

Cincinnati, USA, University (04.05.2016) and

Ohio State University (CCAPP) (06.05.2016) and

Chicago, Illinois, USA, North Western University (13.05.2016)

Sturm, S.:

Ionenfallen für fundamentale Physik - Präzisionsmessungen fundamentaler Konstanten und Wechselwirkungen.

Greifswald, Germany, Greifswalder Physikalisches Kolloquium, Institut für Physik, Ernst Moritz Arndt Universität (21.04.2016)

Die Suche nach den Grenzen des Standardmodells der Physik mit Präzisions-Penningfallen und wie lasergekühlte Ionen den nächsten großen Schritt ermöglichen werden.

Gräfelfing/München, Germany, Kolloquium der TOPTICA Photonics AG (18.10.2016)

Tibaldo, L.:

High- and intermediate-velocity clouds as a tracer of cosmic rays in the Galactic halo.

Madison-WI, USA, WIPAC, University of Wisconsin Madison, NPAC Forum (10.02.2016) and
Toulouse, France, IRAP, Seminar (18.03.2016)

Highlights on cosmic rays and the interstellar medium in the Milky Way from observations of interstellar gamma-ray emission with Fermi.

Innsbruck, Austria, Institut für Astro- und Teilchenphysik, Leopold-Franzens-Universität Innsbruck, Seminar (16.06.2016)

Versolato, O.:

The Physics of plasma EUV sources.

Amsterdam, Netherlands, VU seminar (08.02.2016)

Viana, A.:

The Galactic Centre as a powerful cosmic PeVatron.

Annecy, France, LAPP, Seminar (4.11.2016) and
Montreal, Canada, Mc Gill University, Seminar (6.06.2016) and
Bordeaux, France, CENBG, Seminar (19.02.2016) and
Paris, France, LPNHE-Jussieu, Seminar (8.02.2016) and
Palaiseau, France, LLR, Ecole Polytechnique, Seminar (11.01.2016)

Wagner, V.:

First data release of GERDA Phase II.

Assergi, Italy, LNGS, Meeting of the Gran Sasso Scientific Committee (17.10.2016)

Wolf, A.:

Molecular Ion Beams Stored for an Hour: First Experiments with the Heidelberg CSR .

Heidelberg, Germany, Physikalisches Kolloquium, Universität Heidelberg (22.07.2016)

Wolf, R.:

Multi-reflection time-of-flight mass separation and spectrometry at ISOLTRAP

Berkeley, CA, USA, Cyclotron Physics group meeting, Lawrence National Laboratory (22.03.2016)

The ALPHATRAP g-factor experiment

Genf, Schweiz, ISOLDE Physics group meeting, ISOLDE/CERN (27.07.2016)

Zanin, R.:

Detection of high-energy emission of likely jet origin from Cygnus X-1.

Zeuthen, Germany, DESY, Seminar (02.12.2016)

Zhang, L.:

Diffractionless and lossless propagation and reproduction of laser beams with arbitrary spatial profiles in atomic vapor.

Birmingham, United Kingdom, Midlands Ultracold Atom Research Centre, School of Physics and Astronomy, University of Birmingham, Academic visit (10.06.2016)

Lectures and Courses at Universities

Summer Semester 2014

Aharonian, F.A.:

Lectures course on "Nonthermal X-ray Universe" (4 lectures)

5th ASTRO-H Summer School, APC, Paris, France

Bauke, H., Di Piazza, A., Keitel, C. H.:

Lecture: Advanced Quantum Theory

(including coordination of tutorials)

Universität Heidelberg

Blaum, K., Wolf, A.:

Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.

Universität Heidelberg

Blaum, K.:

Vorlesung: Stored Charged Particles – Precision Experiments with Stored and Cooled Particles.

Universität Heidelberg

Buck, C., Simgen, H. und Rodejohann, W.:

Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.

Universität Heidelberg

Dorn, A.:

Tutor for Exercises: Experimental Physics 4.

Universität Heidelberg

Evers, J.:

Lecture: Theoretical Quantum Optics

Heidelberg University

Harman, Z.:

Tutorial for lecture: Experimentalphysik II

Universität Heidelberg

Keitel, C. H., Pálffy-Buß, A.:

Oberseminar: Theoretische Quantendynamik

Universität Heidelberg

Kellerbauer, A.:

Übungen zur Experimentalphysik IV(PE4).

Universität Heidelberg

Kopp, J.:

Dark Matter.

Universität Heidelberg

Kreckel, H.:

Übungen zur Experimentalphysik IV (PEP4).

Universität Heidelberg

Kumar, N.:

Tutorial for lecture: Experimentalphysik II

Heidelberg University

Lindner, M.:

Teilchen- und Astroteilchen-Theorie.

Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".

Universität Heidelberg, MPIK

Pálffy-Buß, A.:

Tutorial for lecture: Experimentalphysik IV

Universität Heidelberg

Pfeifer, T.:

Journal Club: "Quantum Dynamics and Control".

Universität Heidelberg, MPIK

Übungen zur Experimentalphysik IV (PEP4) (Recitation class, atomic, molecular and optical physics).

Universität Heidelberg

Rieger, F.M.:

Seminar on High Energy Astrophysics (Experiments).

Universität Heidelberg

Wolf, A.:

Übungen zur Experimentalphysik IV (PEP4).

Universität Heidelberg

Winter Semester 2014/2015

Aharonian, F.A.:

Lecture course for graduate students on High Energy Gamma Ray Astronomy (16 lectures)
Gran Sasso Science Institute ,L'Aquila, Italy

Blaum, K., Wolf, A.:

Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.
Universität Heidelberg

Blaum, K.:

Vorlesung: Moderne Massenspektrometrie.
Universität Heidelberg

Buck, C., Rodejohann, W. und Simgen, H.:

Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.
Universität Heidelberg

Di Piazza, A.:

Tutorial for lecture: Experimentalphysik III
Universität Heidelberg

Dorn, A.:

Tutor for exercises: Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Evers, J.:

Tutorial for lecture: Experimentalphysik III
Universität Heidelberg

Harman, Z.

*Lecture: Fundamental physics in strong Coulomb fields
(together with Tashenov, S.)*
Universität Heidelberg

Keitel, C. H., Kumar, N.:

Oberseminar: Theoretische Quantendynamik
Universität Heidelberg

Lindner, M. und Marrodán Undagoitia, T.:

Dark Matter - Theory and Experiment.
Universität Heidelberg

Lindner, M.:

Teilchen- und Astroteilchen-Theorie.
Universität Heidelberg

Moshammer, R., Crespo López-Urrutia, J. R.:

Vorlesung "Advanced Atomic, Molecular and Optical Physics" (MKEP3).
Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".
Universität Heidelberg, MPIK

Pálffy-Buß, A.:

Tutorial for lecture: Experimentalphysik III
Universität Heidelberg

Pfeifer, T.:

*Journal Club: "Quantum Dynamics and Control".
Bachelor Seminar "Per Anhalter durch die Atom- und Molekülphysik" (engl. "A hitchhiker's guide to atomic and molecular physics").*
Universität Heidelberg

Rieger, F.:

Seminar on Astroparticle Physics.

Universität Heidelberg

Tutorial Experimental Physics (PEP1).

Universität Heidelberg

Rodejohann, W.:

The Standard Model of Particle Physics II: Theory.

Universität Heidelberg

Schmelling, M.:

Statistische Methoden der Datenanalyse II

TU Dortmund (Blockkurs 3/2015)

Smirnov, A. Y.:

Introduction to Particle Physics.

International Centre for Theoretical Physics, Trieste, Italy

Wolf, A.:

Tutorial on Advanced Atomic, Molecular and Optical Physics.

Universität Heidelberg

Summer Semester 2015

Blaum, K., Wolf, A.:

Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.
Universität Heidelberg

Blaum, K./Sturm, S.:

Vorlesung: Modern Experiments in AMO.
Universität Heidelberg

Buck, C., Lindner, M., Rodejohann, W. and Simgen, H.:

Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.
Universität Heidelberg

Crespo López-Urrutia, J. R.:

Ring Lecture AMO Physics in Heidelberg.
Universität Heidelberg

Di Piazza, A.:

Lecture: Quantum Electrodynamics
Universität Heidelberg

Dorn, A.:

Ring Lecture AMO Physics in Heidelberg.
Universität Heidelberg

Harman, Z.:

Tutorial for lecture: Experimentalphysik IV
Universität Heidelberg

Ring Lecture AMO Physics in Heidelberg, one lecture: Exploring fundamental physics with highly charged ions (together with Tashenov, S.)
Universität Heidelberg

Keitel, C. H., Kumar, N.:

Oberseminar: Theoretische Quantendynamik
Universität Heidelberg

Kellerbauer, A.:

Beitrag zur "AMO Physics in Heidelberg".
Universität Heidelberg

Kellerbauer, A.:

Übungen zur Experimentalphysik IV (PEP4).
Universität Heidelberg

Kreckel, H.:

Beitrag zur "AMO Physics in Heidelberg".
Universität Heidelberg

Kreckel, H.:

Übungen zur Experimentalphysik IV (PEP4).
Universität Heidelberg

Lindner, M.:

*Current Topics in Astroparticle Physics: Theory and Experiment.
Teilchen- und Astroteilchen-Theorie.*
Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".
Universität Heidelberg, MPIK

Pálffy-Buß, A.:

Lecture: Advanced Quantum Theory
Universität Heidelberg

Pfeifer, T., Blaum, K., Crespo López-Urrutia, J. R., Dilling, J., Dorn, A., Moshammer, R.:

Graduate (Master) seminar series: "Modern Experiments in AMO"

Universität Heidelberg, MPIK

Pfeifer, T.:

Journal Club: "Quantum Dynamics and Control".

Universität Heidelberg, MPIK

Rieger, F.:

Lecture Course on Theoretical High Energy Astrophysics - an introduction.

Universität Heidelberg

Simgen, H.:

Current topics in astroparticle physics: theory and experiment.

Universität Heidelberg

Wolf, A.:

Ring Lecture AMO Physics in Heidelberg.

Universität Heidelberg

Winter Semester 2015/2016

Aharonian, F.A.:

Lecture course for graduate students on "High Energy Astrophysics" (16 lectures)

Gran Sasso Science Institute ,L'Aquila, Italy

Lecture course on "Gamma Ray Astrophysics" (8 lectures)

Universidade Federal de Santa Catarina Florianópolis, Brazil

Lecture course on "Relativistic Outflows in Astrophysics" (2 lectures)

Moscow Engineering Physics Institute, Moscow, Russia

Bernlöhr, K.:

High Energy Astrophysics I

Universität Heidelberg

Blaum, K., Sturm, S.:

Vorlesung: Stored Charged Particles – Precision Experiments with Stored and Cooled Particles.

Universität Heidelberg

Di Piazza, A.:

Tutorial for lecture: Theoretical Physics I

Universität Heidelberg

Dorn, A.:

Organizer of exercises: Advanced Atomic, Molecular and Optical Physics.

Universität Heidelberg

Evers, J.:

Tutorial for lecture: Advanced Atomic, Molecular and Optical Physics

Universität Heidelberg

Harman, Z.:

Lecture: Bound-state quantum electrodynamics

(together with Quint, W.)

Universität Heidelberg

Keitel, C. H., Kumar, N.:

Oberseminar: Theoretische Quantendynamik

Universität Heidelberg

Lindner, M. and Rodejohann, W.:

The Standard Model of Particle Physics II: Theory.

Universität Heidelberg

Marrodán Undagoitia, T. and Plehn, T.:

Dark matter.

Universität Heidelberg

Moshammer, R., Crespo López-Urrutia, J. R.:

Vorlesung "Advanced Atomic, Molecular and Optical Physics" (MKEP3).

Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".

Universität Heidelberg, MPIK

Pálffy-Buß, A.:

Tutorial for lecture: Experimentalphysik III

Universität Heidelberg

Pfeifer, T.:

Journal Club: "Quantum Dynamics and Control".

Universität Heidelberg, MPIK

Tutorium zur Vorlesung Advanced Atomic, Molecular and Optical Physics (Recitation class, AMO physics).

Universität Heidelberg

Rieger, F.:

Seminar on High Energy Astrophysics (Physics & Experiments)
Universität Heidelberg

Schmeling, M.:

Statistische Methoden der Datenanalyse II
TU Dortmund (Blockkurs 3/2015)

Skoromnik, O. D.:

*Tutorial for lecture: Theoretical statistical physics
(together with U. Schwarz)*
Universität Heidelberg

Smirnov, A. Y.:

Introduction to Particle Physics.
International Centre for Theoretical Physics, Trieste, Italy

Wolf, A.:

Tutorial on Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Summer Semester 2016

Aharonian, F.A.:

Lecture for students and young researchers on "Radiation and absorption processes in high energy astrophysics"
Dublin Institute for Advanced Studies, Dublin, Ireland

Bernlöhr, K.:

High Energy Astrophysics II
Universität Heidelberg

Blaum, K.:

Übungen zur Experimentalphysik IV (Dozent J. Stachel).
Universität Heidelberg

Blaum, K.; Wolf, A.:

Oberseminar: Physik mit gespeicherten und gekühlten Ionen.
Universität Heidelberg

Buck, C., Lindner, M., Rodejohann, W. und Simgen, H.:

Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.
Universität Heidelberg

Crespo López-Urrutia, J. R.:

Ring Lecture AMO Physics in Heidelberg.
Universität Heidelberg

Di Piazza, A.:

Lecture series: Quantum Electrodynamics: Basic foundations and modern issues in the presence of intense background electromagnetic fields
at the 36th Heidelberg Physics Graduate Days, Universität Heidelberg

Dorn, A.:

Ring Lecture AMO Physics in Heidelberg.
Universität Heidelberg

Evers, J.:

Lecture: Theoretical Quantum Optics
Universität Heidelberg

Harman, Z.:

Ring Lecture AMO physics in Heidelberg, one lecture: Bound-state quantum electrodynamics
Universität Heidelberg

Keitel, C. H., Kumar, N.:

Oberseminar: Theoretische Quantendynamik
Universität Heidelberg

Kellerbauer, A.:

Beitrag zur "AMO Physics in Heidelberg".
Universität Heidelberg

Kellerbauer, A.:

Übungen zur Experimentalphysik IV (PEP4).
Universität Heidelberg

Kreckel, H.:

Beitrag zur "AMO Physics in Heidelberg".
Universität Heidelberg

Lindner, M.:

*Astroteilchen
Current Topics in Astroparticle Physics: Theory and Experiment.
Teilchen- und Astroteilchen-Theorie.*
Universität Heidelberg

Meyer, K.:

Ring Lecture AMO Physics: Ultrafast Pump-Probe Measurements with Molecules (01.07.2016)
Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".
Universität Heidelberg, MPIK

Pálffy-Buß, A.:

Tutorial for lecture: Theoretical Quantum Optics
Universität Heidelberg
Ring Lecture AMO Physics in Heidelberg, one lecture: Nuclear transitions in atomic physics
Universität Heidelberg

Pfeifer, T., Feuerstein, B., Crespo López-Urrutia, J. R., Dorn, A., Moshammer, R.:

Bachelor Seminar "Key experiments & theory in quantum dynamics with atoms, molecules, and light".
Universität Heidelberg

Pfeifer, T.:

Journal Club: "Quantum Dynamics and Control".
Universität Heidelberg, MPIK

Rieger, F.:

Lecture Course Theoretical High Energy Astrophysics - an introduction.
Universität Heidelberg

Simgen, H.:

Current topics in astroparticle physics: theory and experiment.
Universität Heidelberg

Skoromnik, O. D.:

Tutorial for lecture: Quantum Field Theory II
(together with A. Hebecker)
Universität Heidelberg

Wolf, A.:

Ring Lecture AMO Physics in Heidelberg.
Universität Heidelberg

Winter Semester 2016/17

Blaum, K., Sturm, S.:

Vorlesung: Stored Charged Particles – Precision Experiments with Stored and Cooled Particles.
Universität Heidelberg

Blaum, K.; Wolf, A.:

Oberseminar: Physik mit gespeicherten und gekühlten Ionen.
Universität Heidelberg

Crespo López-Urrutia, J. R.:

Coordinator for exercises: Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Di Piazza, A.:

Tutorial for lecture: Theoretical Statistical Physics
Heidelberg University

Dorn, A.:

Tutor for exercises: Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Evers, J.:

Tutorial for lecture: Experimentalphysik III
Universität Heidelberg

Harman, Z.:

*Lecture: Bound-state quantum electrodynamics
(together with Quint, W.)*
Universität Heidelberg

Keitel, C. H., Kumar, N.:

Oberseminar: Theoretische Quantendynamik
Universität Heidelberg

Kreckel, H.:

Vorlesung Molecular Astrophysics.
Universität Heidelberg

Lindner, M. und Rodejohann, W.:

The Standard Model of Particle Physics II: Theory.
Universität Heidelberg

Lindner, M.:

*Standard model II and beyond: Symmetry breaking, neutrinos, dark matter.
Teilchen- und Astroteilchen-Theorie.*
Universität Heidelberg

Moshammer, R., Pfeifer, T.:

Oberseminar: "Atomic Physics: Structure and Dynamics".
Universität Heidelberg, MPIK

Moshammer, R.:

Übungen zur Experimentalphysik IV (PEP3).
Universität Heidelberg

Ott, C.:

Tutorial to Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Pfeifer, T., Crespo López-Urrutia, J. R., Dorn, A., Moshammer, R.:

Graduate (Master) Seminar "Current Experimental Frontiers of Quantum Dynamics Research".
Universität Heidelberg

Pfeifer, T.:

Journal Club: "Quantum Dynamics and Control".
Universität Heidelberg, MPIK

Rieger, F.:

Lecture Course High Energy Astrophysics (with exercises)
Universität Heidelberg

Skoromnik, O. D.:

*Tutorial for lecture: Theoretical statistical physics
(together with M. Salmhofer)*
Universität Heidelberg

Smirnov, A. Y.:

Introduction to Particle Physics.
International Centre for Theoretical Physics, Trieste, Italy

Wolf, A.:

Tutorial on Advanced Atomic, Molecular and Optical Physics.
Universität Heidelberg

Jointly Organized Conferences and Workshops

Amherst, MA, USA, International Workshop on Baryon and Lepton Number Violation (BLV2015) (27.04.-30.04.2015)
M. Duerr

Berlin, Germany, Relativistic Laboratory Astrophysics (22.11.-25.11.2015)
J. Kirk

Bled, Slovenia, RICH 2016, 9th International Workshop on Ring Imaging Cherenkov Detectors (05.09.-09.09.2016)
W. Hofmann

Heidelberg, Germany, 25th International Workshop on Weak Interactions and Neutrinos "WIN2015" (08.06.-13.06.2015)
E. Akhmedov, M. Duerr, H. Simgen, W. Rodejohann, A.Y. Smirnov

Heidelberg, Germany, 6th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy (11.07.-15.07.2016)
F.A. Aharonian, J. Hinton, W. Hofmann, F.M. Rieger

Heidelberg, Germany, Conference on Extreme High-Intensity Laser Physics (ExHILP) (21.07.-24.07.2015)
A. Di Piazza, C.H. Keitel, K.Z. Hatsagortsyan

Heidelberg, Germany, CSR Workshop on Research Opportunities as Cryogenic Electrostatic Storage Rings (19.05.-20.05.2016)
K. Blaum, A. Wolf, O. Novotný

Heidelberg, Germany, DPG-Frühjahrstagung der Sektionen AMOP und HK (23.03.-27.03.2015)
K. Blaum

Heidelberg, Germany, Galaxy And Mass Assembly Meeting (09.09.-11.09.2015)
R. Tuffs

Heidelberg, Germany, Heidelberg Laboratory Astrophysics Workshop (01.10.-02.10.2015)
H. Kreckel

Heidelberg, Germany, Variable Galactic Gamma-ray Sources III Workshop (04.05.-06.05.2015)
F.A. Aharonian, P. Bordas Coma

Heidelberg, Germany, Workshop on Quantum Dynamics in Physics, Chemistry and Biology (01.10.2014)
C.H. Keitel, A. Di Piazza

Heidelberg, Germany, Workshop on Quantum Dynamics in Physics, Chemistry and Biology (30.11.2016)
C.H. Keitel, J. Evers

Kreuth, Germany, Ringberg Castle, Fifth Meeting on Science with FELs (16.02.-19.02.2014)
R. Moshammer, I. Schlichting (MPIfM)

Kreuth, Germany, Ringberg Castle, Seventh Meeting on Science with FELs (07.02.-10.02.2016)
R. Moshammer, I. Schlichting (MPIfM)

Kreuth, Germany, Ringberg Castle, Sixth Meeting on Science with FELs (22.02.-25.02.2015)
R. Moshammer, I. Schlichting (MPIfM)

London, UK, XXVII International Conference on Neutrino Physics and Astrophysics (04.07.-09.07.2016)
R.S.L. Hansen, A.Y. Smirnov

Mainz, Germany MTP Workshop Crossroads of Neutrino Physics (20.07.-14.08.2015)
A.Y. Smirnov

Mainz, Germany, European Conference on Trapped Ions (15.09.-19.09.2014)
K. Blaum, S. Sturm

Moscow, Russia, XVIIth Lomonosov Conference on Elementary Particle Physics (20.08.-26.08.2015)
E. Akhmedov

München, Germany, MIAPP workshop, Neutrinos in Astro- and Particle Physics (29.06.-13.07.2014)
A.Y. Smirnov

Neunkirchen, Germany, Workshop on Quantum Dynamics in Physics, Chemistry and Biology (02.10.-03.10.2015)
C.H. Keitel, A. Di Piazza

Otranto, Italy, Neutrino Oscillation Workshop (04.09.-11.09.2016)

A.Y. Smirnov

Ottawa, Canada, Expert Committee meeting of the Canada Foundation for Innovation (30.09.-04.10.2014)

A.Y. Smirnov

South Dakota, USA, State University, CETUP – WORKSHOP ON DARK MATTER (06.2015)

F.da Silva Queiroz

The Hague, The Netherlands, ICRC 2015, 34th International Cosmic Ray Conference (30.07.-06.08.2016)

J. Hinton

Torino, Italy, XIVth International Conference on Topics in Astroparticle and Underground Physics TAUP 2015 (07.09.-11.09.2015)

A.Y. Smirnov

Trieste, Italy, XVI International workshop on Neutrino Telescopes (02.03.-06.03.2015)

A.Y. Smirnov

Habilitations, Dissertations and Theses 2014

Habilitations

- Fischer, D. (2014). Few-particle quantum-dynamics in ion-atom collisions. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Harman, Z. (2014). Ionic Quantum Dynamics and High-Precision Theory. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Marrodán Undagoitia, T. (2014). Revealing the nature of dark matter with XENON. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Pálffy, A. (2014). Nuclear and atomic quantum dynamics. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Rieger, F. M. (2014). Gamma-Ray Astrophysics. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.

Dissertations

- Andrae, E. (2014). The GALEX-GAMA Survey and its Application to the Statistical Inference of the Attenuation of Starlight by Dust in Spiral Galaxies. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Augustin, S. (2014). Bethe–Heitler Pair Creation in a Bichromatic Laser Field. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Beyer, T. (2014). Installation and operation of a radio-frequency quadrupole cooler and buncher and offline commissioning of the TRIGA-SPEC ion beam preparation transfer line. PhD Thesis, Karl-Ruprechts-Universität, Heidelberg.
- Boll, R. (2014). Imaging Molecular Structure with Photoelectron Diffraction. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- De Carvalho Rodegheri, C. (2014). Neuartige kryogene Penning-Falle für den Nachweis von Spin-Übergängen eines Protons und Bestimmung seines g-Faktors. PhD Thesis, Johannes Gutenberg Universität, Mainz.
- Fechner, L. (2014). High resolution experiments on strong-field ionization of atoms and molecules: test of tunneling theory, the role of doubly excited states, and channel-selective electron spectra. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Fink, D. A. (2014). Improving the selectivity of the ISOLDE resonance ionization laser ion source and in-source laser spectroscopy of Polonium. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Fontana, M. (2014). Search for the $B_{d,s}^0 \rightarrow K^{*0}K_s^0$ decays at LHCb. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Goncharov, M. L. (2014). High-precision Penning-trap mass spectrometry at SHIPTRAP and PENTATRAP for neutrino physics research. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Goullon, J. (2014). One- and two-electron processes in charge transfer and single ionization in ion-lithium collisions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Hahn, J. (2014). Supernova Remnants with H.E.S.S.: Systematic Analysis and Population Synthesis. PhD Thesis, Ruprechts-Karls-Universität, Heidelberg.
- Heeck, J. (2014). Neutrinos and Abelian Gauge Symmetries. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Heeg, K. P. (2014). X-Ray Quantum Optics With Mössbauer Nuclei In Thin-Film Cavities. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Hillert, A. (2014). GRASP: Development of an event reconstruction method using a Gamma Ray Air Shower Parameterisation and application to γ -ray sources with H.E.S.S. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kaldun, A. (2014). Fano Resonances in the Time Domain - understanding and controlling the absorption and emission of light. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kirsch, A. (2014). Search for the neutrinoless double β -decay in Gerda Phase I using a Pulse Shape Discrimination technique. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg

Lim, K. S. (2014). New Aspects Of Scale And Discrete Flavor Symmetry Breaking. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Meyer, K. (2014). Coherent and statistical phase control and measurements of time-dependent quantum dynamics. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Neitz, N. (2014). Radiation-Reaction Effects in the Quantum Regime. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schnorr, K. (2014). XUV Pump-Probe Experiments on Electron Rearrangement and Interatomic Coulombic Decay in Diatomic Molecules. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Skoromnik, O. (2014). Dynamics of an electron spin in strong classical and quantized electromagnetic fields. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Streubel, S. (2014). Kontrolle der Umwelteinflüsse auf THe-Trap am Beispiel der Bestimmung des Massenverhältnisses von Kohlenstoff-12 zu Sauerstoff-16. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Wagner, S. (2014). Energy Non-Linearity Studies and Pulse Shape Analysis of Liquid Scintillator Signals in the Double Chooz Experiment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Yakaboylu, E. (2014). Relativistic features and time delay of laser-induced tunnel-ionization. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Master and Bachelor Theses

Bakar, F. (2014). Design eines Breitband-XUV Gitterspektrometers und numerische Simulationen zur multidimensionalen XUV-Spektroskopie. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Beerwerth, R. (2014). The Lanczos Algorithm in Relativistic Quantum Dynamics. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Danisch, M. (2014). Scintillation light detection in XENON1T: Photosensor tests and light collection simulations. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Dobrodey, S. (2014). Untersuchung von K-LL-Resonanzen dielektronischer Rekombination und simultaner Innerschalen-Vakuum-Ultraviolet Übergänge in hochgeladenem Eisen mit einer Elektronenstrahl- Ionenfalle. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Dold, D. (2014). Energy Conservation In Fano Spectral Line Shape Control. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Dombrowski, J. (2014). Stimulated photon-photon scattering of three colliding high-energy Gaussian beams. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Donath, A. (2014). Towards the H.E.S.S. Galactic Plane Survey Gamma-Ray Source Catalog. Master Thesis,

Ruprecht-Karls-Universität, Heidelberg.

Erlewein, S. (2014). Aufbau und Test eines Vibrationssensors für das ALPHATRAP Projekt. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Hirzler, H. (2014). Aufbau und Test der Transferbeamline für das ALPHATRAP Projekt. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Hollain, D. (2014). Vermessung vom hochgeladenen Iridium mithilfe eines neuen Kontrollsysteams. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kaul, S. (2014). Optische Spektroskopie an Ir und Os in Level-crossing-Systemen zur erstmaligen Identifizierung observierter Übergänge. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Krämer, S. (2014). Aufbau und Charakterisierung eines Geschwindigkeitsfilters für das ALPHATRAP-Experiment. Bachelor Thesis, Ruprechts-Karls-Universität, Heidelberg.

Lauble, F. (2014). Erzeugung eines nuklearen Polaritons mit zwei verschränkten Zweigen mithilfe von Magnetfelddrehungen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Ludwig, A. (2014). Pulsvermessung durch Pulsformung im Femtosekundenbereich: Experiment und Modellierung. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Martins, F. (2014). The Reactor Antineutrino Anomaly and the Sterile Neutrino Hypothesis. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Müller, N. (2014). Nichtlinear-optische Spektroskopie mit kontrollierten und statistischen Phasen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Ohmer, S. (2014). Low Scale Unification with New Fundamental Forces. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rauch, L. F. (2014). Detector characterization, electronic-recoil energy scale and astrophysical independent results in XENON100. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Reiser, P. (2014). Time Domain Control of X-Ray Quantum Dynamics. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rischka, A. (2014). Aufbau des Stabilisierungssystems des Heliumdrucks und Heliumlevels und Konstruktion eines kryogenen Faraday-Bechers für PENTATRAP. Master Thesis, Karl-Ruprecht-Universität, Heidelberg.

Schuh, M. (2014). Simulations of the electrostatic and magnetic field properties and tests of the Penning-ion source at THe-Trap. Master Thesis, Karl-Ruprecht-Universität, Heidelberg.

Stachurska, J. (2014). Sterile Neutrinos in Extra Dimensions as Warm Dark Matter Candidates. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Stolzenburg, D. (2014). On the krypton background of the Xenon100 and Xenon1T dark matter search experiments. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Turkalj Orešković, M. (2014). Development of a cryogenic vacuum valve and an electromechanical switch for ALPHATRAP. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Weigel, A. (2014). Entwicklung des kryogenen Nachweissystems für ALPHATRAP und THe-Trap. Master Thesis, Karl-Ruprecht-Universität, Heidelberg.

Weis, R. (2014). Myonische Vakuumpolarisationskorrekturen zum g-Faktor eines gebundenen Elektrons. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Dissertations and Theses 2015

Dissertations

- Belov, N. (2015). Nuclear effects in atomic and solid state physics. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Böhm, C. (2015). High-precision mass measurements of neutron-deficient Tl isotopes at ISOLTRAP and the development of an ultra-stable voltage source for the PENTATRAP experiment. PhD Thesis, Ruprechts-Karls-Universität, Heidelberg.
- Cörlin, P. (2015). Tracing ultra-fast molecular dynamics in O_2^+ and N_2^+ with XUV–IR pump–probe experiments. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Dörr, A. (2015). PENTATRAP: A novel Penning-trap system for high-precision mass measurements. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Fischer, A. (2015). Dissociative Photoionization of Molecular Hydrogen: A Joint Experimental and Theoretical Study of the Electron-Electron Correlations induced by XUV Photoionization and Nuclear Dynamics on IR-Laser Dressed Transition States. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gunst, J. F. (2015). Mutual control of x-rays and nuclear transitions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Haser, J. A. (2015). Neutron Detection Uncertainties in the θ_{13} Analysis of the Double Chooz Experiment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Herwig, P. (2015). Coulomb Explosion Imaging studies of fundamental molecular structure. PhD Thesis, Ruprechts-Karls-Universität, Heidelberg.
- Jordan, E. J. (2015). High-resolution Doppler laser spectroscopy of the laser cooling candidate La. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Ketter, J. (2015). Theoretical treatment of miscellaneous frequency-shifts in Penning traps with classical perturbation theory. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Köhler, F. (2015). Bound-Electron g-Factor Measurements for the Determination of the Electron Mass and Isotope Shifts in Highly Charged Ions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Liu, R. (2015). Constraining sources of ultrahigh energy cosmic rays and shear acceleration mechanism of particles in relativistic jets. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Meuren, S. (2015). Nonlinear quantum electrodynamic and electroweak processes in strong laser fields. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Salathe, M. (2015). Study on modified point contact germanium detectors for low background applications. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Schönwald, M. (2015). On the Contribution of autoionizing states to XUV radiation-induced double ionization of nitrous oxide (N_2O). PhD Thesis, Johann Wolfgang Goethe-Universität, Frankfurt am Main.
- Spruck, K. (2015). Dielectronic Recombination Experiments with Tungsten Ions at the Test Storage Ring and Development of a Single-Particle Detector at the Cryogenic Storage Ring. PhD Thesis, Justus-Liebig-Universität, Gießen.
- Steinbrügge, R. F. (2015). Bestimmung von absoluten Auger- und radiativen Zerfallsraten K-Schalen-angeregter hochgeladener Eisenionen. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Windberger, A. (2015). Identification of optical transitions in complex highly charged ions for applications in

metrology and tests of fundamental constants. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Zhang, L. (2015). Coherent control and manipulation of classical or quantum light via nonlocal effects. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Master and Bachelor Theses

Blessenohl, M. (2015). Optische Spektroskopie an hochgeladenen Bismut-Ionen und Konstruktion eines hochauflösenden VUV-Gitterspektrometers. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Bogda, C. (2015). Umbau und Inbetriebnahme eines MOTReMi-Aufbaus für zukünftige Experimente mit ultrakaltem ^6Li . Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Borisova, G. D. (2015). Einfluss der Elektron-Elektron-Korrelation auf die Ionisation von Atomen in starken, ultrakurzen Laser-Impulsen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Cichon, D. (2015). Identifying ^{222}Rn decay chain events in liquid xenon detectors. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Door, M. (2015). Erzeugung hochgeladener Chlor- und Siliziumionen für das Pentatrap-Experiment in einer Elektronenstrahlionenquelle unter Anwendung der MIVOC-Methode. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Erhard, R. (2015). Investigation of the Kapitza-Dirac effect in elliptically polarized fields. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Falk, L. M. (2015). Aufbau eines Beat-Offset-Lock am Lasersystem eines ^6Li -MOTReMi. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Feuchtenbeiner, S. (2015). Lasersysteme für die Präzisionsspektroskopie sympathetisch gekühlter hochgeladener Ionen. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Heizmann, L. (2015). Generation of elliptically polarised laser pulses for ionisation experiments in reaction microscopes. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kaiser, M. (2015). Attosekundenpulse. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Klee, L.-J. (2015). Maximum-Likelihood-Analyse für den Nachweis von ^{222}Rn . Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Klein, C. (2015). Study on neutrino beam experiments with multi-layer matter profiles. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kromer, K. (2015). Rekombinationsprozesse in hochgeladenem Bismut und Praseodym. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Lion, J. (2015). Das mit Flüssigargon gekühlte supraleitende Magnetsystem des Elektronenkühlers am kryogenen Ionen-Speicherring CSR. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Lohmann, S. (2015). Beam diagnostics and collector for the electron cooler of the cryogenic storage ring CSR. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Luo, D. (2015). Untersuchung der Erzeugung von Neon Clustern mit einem Reaktionsmikroskop. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Michel, N. (2015). Precision Physics of the Bound Electron g-factor. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Palm, L. (2015). Aufbau einer neuen XUV-Quelle und 2D Simulation von Wellenpaketdynamik in H_2^+ -Molekülen.

külen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Paluch, P. (2015). Inbetriebnahme und Charakterisierung eines Phosphordetektors zur Elektronenspektroskopie. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Piest, B. (2015). Injektion, Speicherung und Abbildung hochgeladener Argon-Ionen in der kryogenen Paul-Falle CryPTEEx. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Prottung, J. (2015). Simulation von zeitaufgelösten starken Feldeffekten in Helium. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rebholz, M. (2015). Design and construction of an experimental setup for multidimensional spectroscopy in the XUV/ soft-X-ray spectral region. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rink, T. (2015). Investigating Neutrino Magnetic Moments: A Parameter Study. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rupp, N. (2015). On the detection of ^{222}Rn with miniaturized proportional counters: background, sensitivity studies and results for XENON1T. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Sailer, T. (2015). Aufbau einer Präzisionsspannungsquelle für das ALPHATRAP-Experiment. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schüssler, R. (2015). A new Detection System for the high-precision Penning-trap mass spectrometer PENTATRAP. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Stark, J. (2015). Design ultrastabiler Hochfrequenzfelder für die Langzeitspeicherung hochgeladener Ionen. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Stooß, V. (2015). Time-resolved strong field effects in transient-absorption spectroscopy of two-electron systems. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Weegen, M. (2015). Ein Teilchendetektor für die Untersuchung atomarer Reaktionen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Habilitations, Dissertations and Theses 2016

Habilitations

Casanova, S. (2016). Gamma-ray Emission from the Molecular Clouds and the Origin and Transport of Cosmic Rays in the Galaxy. Habilitation Thesis, The Institute of Nuclear Physics of the Polish Academy of Sciences, Krakow, Poland.

Eliseev, S. (2016). High-precision measurements of nuclide masses with Penning traps for fundamental physics. Habilitation Thesis, Russian Academy of Sciences, Moscow.

Dissertations

Atanasov, D. (2016). Precision mass measurements for studies of nucleosynthesis via the rapid neutron-capture process. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

Becker, A. (2016). Imaging of Neutral Fragmentation Products from Fast Molecular Ion Beams: Paving the Way for Reaction Studies in Cryogenic Environment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

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de Roubin, A. (2016). Mass measurements of neutron-rich strontium and rubidium isotopes in the region $A \approx 100$ and development of an electrospray ionization ion source. PhD Thesis, Université de Bordeaux, Bordeaux.

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Grussie, F. (2016). Experimental studies of ion-neutral reactions under astrophysical conditions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

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Master and Bachelor Theses

Adam, V. (2016). Design und Charakterisierung einer Wasserclusterquelle für den Einsatz an FLASH. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

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Froß, P. (2016). Simulation, Aufbau und Test eines Velocity-Map-Imaging-Spektrometers zur Untersuchung niederenergetischer Photoelektronen. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Guerin, E. A. (2016). Metastable States of Si⁻ Observed in a Cryogenic Storage Ring. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Hartmann, M. (2016). Characterization of Few-Cycle Laser Pulses. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Hilkert, A.-S. (2016). A Peak Finding Algorithm to Identify Double Peaks in Signal Traces of A Reaction Microscope For Measurements of Sequential Two-Photon Double-Ionization of Argon at the Free Electron Laser Hamburg. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Kebrich, S. (2016). Feinstruktur, Hyperfeinstruktur und Zeeman–Aufspaltung des titanartigen Re⁵³⁺ im optischen Bereich. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Max, K. (2016). Collective Symmetry Breaking as a Solution to the Hierarchy Problem in the Standard Model. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

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Pizzella, V. (2016). Purity control of the XENON1T gas inventory prior to initial filling and studies of mixing properties of impurities in gaseous xenon. Master Thesis, Università di Roma, Rom.

Potters, N. (2016). Spektroskopische Untersuchung der optischen Übergänge von den hochgeladenen Praseodym-Ionen Pr⁹⁺ bis Pr¹³⁺. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Rothermel, J. (2016). Semiklassische Simulation von Ionisationsprozessen in starken Laserfeldern. Bachelor

Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schneider, A. (2016). Nucleosynthesis in Astrophysical Plasmas. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Institutional Collaborations

A Reaction Microscope for Positron-Impact Ionization Studies:

Australian National University, Canberra, Australia

Active Galactic Nuclei:

DIAS, Dublin, Ireland

AEGIS:

University of Bergen / University of Oslo, Norway
University of Bern / University of Zurich, Switzerland
CERN Geneva, Switzerland
INFN Genova & University of Genova, Italy
Universität Heidelberg, Germany
University College London, UK
University of Lyon, France
INFN & Politecnico Milano, Italy
INR, Moscow, Russia
Laboratoire Aimé Cotton, Orsay, France
INFN Padova/Trento & University of Trento, Italy
INFN Pavia/Brescia & University of Pavia & University of Brescia, Italy
Czech Technical University Prague, Czech Republic
Stefan Meyer Institute, Vienna, Austria
ETH Zurich, Switzerland

ARIEL-EBIS for reacceleration of short lived radioactive isotopes:

TRIUMF, Vancouver, Canada

Astro-H mission:

ISAS/JAXA (Tokyo, Japan)

Atoms and Molecules in Intense XUV light for pump-probe dynamics and strong-field physics:

FLASH, DESY Hamburg, Germany

Attosecond Transient Absorption Spectroscopy:

Universidad Autónoma de Madrid, Spain
Technische Universität München, Germany

Attosecond XUV + NIR experiments resolved in Reaction microscopes:

University of Milano, Italy

Borexino at LNGS:

AstroParticule et Cosmologie, Université Paris Diderot, CNRS/IN2P3, CEA/IRFU, Observatoire de Paris, Sorbonne Paris Cité, France
Joint Institute for Nuclear Research, Dubna, Russia
Dipartimento di Fisica, Università degli Studi e INFN, Genova, Italy
Institut für Experimentalphysik, Universität Hamburg, Germany
Commissariat à l' Énergie Atomique et aux Énergies Alternatives, Centre de Saclay, DEN/DM2S/SEMT/BCCR, Gif-sur-Yvette, France
M. Smoluchowski Institute of Physics, Jagiellonian University, Krakow, Poland
Kiev Institute for Nuclear Research, Kiev, Ukraine
Institute for Theoretical and Experimental Physics, Moscow, Russia
Kepler Center for Astro and Particle Physics, Universität Tübingen, Germany
NRC Kurchatov Institute, Moscow, Russia
National Research Nuclear University MEPhI (Moscow Engineering Physics Institute), Moscow, Russia
INFN Laboratori Nazionali del Gran Sasso, Assergi, Italy
Dipartimento di Fisica, Università degli Studi e INFN, Milano, Italy
Dipartimento di Chimica, Università e INFN, Perugia, Italy
St. Petersburg Nuclear Physics Institute NRC Kurchatov Institute, Gatchina, Russia
Physics Department, Princeton University, Princeton, NJ, USA
Chemical Engineering Department, Princeton University, Princeton, NJ, USA
Physics Department, Queen's University, Kingston, Canada

Amherst Center for Fundamental Interactions and Physics Department, University of Massachusetts, USA
Physics Department, Virginia Polytechnic Institute and State University, Blacksburg, USA
Dipartimento di Fisica e Scienze della Terra Università degli Studi di Ferrara e INFN, Ferrara, Italy
Physik-Department and Excellence Cluster Universe, Technische Universität München, Garching, Germany
Lomonosov Moscow State University Skobeltsyn Institute of Nuclear Physics, Moscow, Russia
Gran Sasso Science Institute (INFN), L'Aquila, Italy
Department of Physics, University of Houston, Houston, USA
Department of Physics, Technische Universität Dresden, Germany
Physics and Astronomy Department, University of California Los Angeles (UCLA), USA
Institute of Physics and Excellence Cluster PRISMA, Johannes-Gutenberg Universität Mainz, Germany

CANREB Electron Beam Ion Source:

TRIUMF, Vancouver, Canada
St. Mary's University, Halifax, Canada

Carrier-Envelope Phase Spectral Interferometry:

National Laboratory for Ultrafast and Ultraintense Optical Science–CNR-INFM Milano, Italy
Universität Erlangen-Nürnberg, Germany

CEP dependence of atomic and molecular strong-field processes:

MPI für Quantenoptik Garching, Germany

Charge breeding for reacceleration of radioactive ion beams at FRIB:

National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, USA

COLLAPS:

KU Leuven, Belgium
Universität Mainz, Germany
CERN Geneva, Switzerland
University of Manchester, UK
University of Liverpool, UK
TU Darmstadt, Germany
IPNO, IN2P3 Paris, France

Compact Gamma-Ray binaries:

University of Barcelona, Spain

Complex solution-phase molecules in strong laser fields:

Department of physical chemistry, Universität Heidelberg, Germany

CONUS:

PreussenElektra GmbH, Kernkraftwerk Brokdorf, Germany

Coulomb Explosion Experiments on Fundamental Molecular Structures:

Institute of Organic Chemistry, Heidelberg University, Germany
Weizmann Institute of Science, Rehovot, Israel
University of Vienna, Austria

Cryogenic Experiments on Trapped Molecular and Cluster Ions:

Universität Greifswald, Germany
Weizmann Institute of Science, Rehovot, Israel
TU Kaiserslautern, Germany

Cryogenic Multi-Pixel Microcalorimeters for Molecular Fragments:

Universität Heidelberg, Germany

Cryogenic Paul traps:

Aarhus University, Denmark

Cryogenic radio-frequency ion traps:

Aarhus University, Denmark
TU München, Germany
PTB, Braunschweig, Germany

Cryogenic Storage Ring:

Weizmann Institute of Science, Rehovot, Israel

Universität Greifswald, Germany
Université Catholique de Louvain-La-Neuve, Belgium
Universität Giessen, Germany
TU Kaiserslautern, Germany

CTA:

Centro de Investigaciones en Láseres y Aplicaciones (CEILAP-CITEFA/CONICET), Argentina
Instituto de Tecnologías en Detección y Astroparticulas (CNEA/CONICET/UNSAM), Argentina
Instituto de Física, Rosario, Argentina
Centro Atómico Bariloche (CNEA-CONICET-IB/UNCUYO), Bariloche, Argentina
Instituto de Astronomía y Física del Espacio (IFAE CONICET-UBA), Buenos Aires, Argentina
Instituto Argentino de Radioastronomía (CCT La Plata-CONICET), Berazategui, Argentina
UID GEMA – Departamento de Aeronáutica (Facultad de Ingeniería, UNLP), La Plata, Argentina
Alikhanyan National Science Laboratory, Physics Institute Yerevan, Yerevan, Armenia
School of Physical Sciences, University of Adelaide, Adelaide, Australia
School of Physics, University of New South Wales, Sydney, Australia
School of Physics, University of Sydney, Sydney, Australia
Research School of Astronomy and Astrophysics, Australian National University, Canberra, Australia
Western Sydney University, Penrith, Australia
School of Physics and Astronomy, Monash University, Melbourne, Australia
Institut für Astro- und Teilchenphysik, Leopold-Franzens-Universität, Innsbruck, Austria
Centro de Ciências Naturais e Humanas, Universidade Federal do ABC, Santo André - SP, Brazil
Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil
Instituto de Astronomia, Geofísico, e Ciências Atmosféricas, Universidade de São Paulo, São Paulo, Brazil
Instituto de Física, Universidade de São Paulo, São Paulo, Brazil
Instituto de Física de São Carlos, Universidade de São Paulo, São Carlos- SP, Brazil
Instituto de Física, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil
Núcleo de Formação de Professores, Universidade Federal de São Carlos, São Carlos - SP, Brazil
ICTP-South American Institute for Fundamental Research - Instituto de Física Teórica da UNESP, São Paulo, Brazil
Universidade Cruzeiro do Sul, Núcleo de Astrofísica Teórica (NAT/UCS), Libertade - SP, Brazil
Escola de Artes, Ciências e Humanidades, Universidade de São Paulo, São Paulo, Brazil
Universidade Federal Do Paraná - Setor Palotina, Departamento de Engenharias e Exatas, Palotina - Paraná, Brazil
Escola de Engenharia de Lorena, Universidade de São Paolo, Lorena, Brazil
Institute for Nuclear Research and Nuclear Energy, BAS, Sofia, Bulgaria
Institute of Astronomy, BAS, Sofia, Bulgaria
Astronomy Department of Faculty of Physics, Sofia University, Sofia, Bulgaria
The University of Manitoba, Winnipeg, Manitoba, Canada
Universidad Católica del Norte, Antofagasta, Chile
Facultad de ciencias físicas y matemáticas, Universidad de Chile, Santiago, Chile
Universidad de Concepción, Concepción, Chile
Pontificia Universidad Católica de Chile, Santiago, Chile
Universidad Técnica Federico Santa María, Valparaíso, Chile
Universidad Andrés Bello UNAB, Santiago, Chile
Universidad de Valparaíso, Valparaíso, Chile
FESB, University of Split, Croatia
Rudjer Boskovic Institute, Zagreb, Croatia
University of Rijeka, Physics Department, Rijeka, Croatia
Charles University, Institute of Particle and Nuclear Physics, Prague, Czech Republic
Institute of Physics of the Academy of Sciences of the Czech Republic, Prague, Czech Republic
Palacky University Olomouc, Faculty of Science, RCPTM, Olomouc, Czech Republic
Aalto University, Aalto, Finland
University of Helsinki, Helsinki, Finland
Department of Physics, University of Oulu, Finland
Tuorla Observatory, University of Turku, Piikkiö, Finland
APC, Univ Paris Diderot, CNRS/IN2P3, CEA/Irfu, Obs de Paris, Sorbonne Paris Cité, France
Centre de Physique des Particules de Marseille (CPPM), Aix-Marseille Université, CNRS/IN2P3, Marseille, France
Institut de Planétologie et d'Astrophysique de Grenoble, INSU/CNRS, Université Joseph Fourier, Grenoble, France
Institut de Recherche en Astrophysique et Planétologie, CNRS-INSU, Université Paul Sabatier, Toulouse, France
Laboratoire d'Annecy-le-Vieux de Physique des Particules, Université de Savoie, CNRS/IN2P3, Annecy-le-Vieux, France

Laboratoire Leprince-Ringuet, École Polytechnique (UMR 7638, CNRS), Palaiseau-Paris, France
Laboratoire Univers et Particules de Montpellier, Université de Montpellier, CNRS/IN2P3, Montpellier, France
Univ. Bordeaux, CNRS, IN2P3, CENBG, UMR 5797, Gradignan, France
CEA/IRFU/SAp, CEA Saclay, Gif-sur-Yvette, France
CEA/IRFU/SEDI, CEA Saclay, Gif-sur-Yvette, France
CEA/IRFU/SIS, CEA Saclay, Gif-sur-Yvette, France
CEA/IRFU/SPP, CEA-Saclay, Gif-sur-Yvette, France
Université Paris-Sud, Institut de Physique Nucléaire d'Orsay (IPNO, IN2P3/CNRS et Université Paris-Sud, UMR 8608), Orsay, France
LUTH and GEPI, Observatoire de Paris, CNRS, PSL Research University, Meudon, France
Sorbonne Universités, UPMC, Université Paris Diderot, Sorbonne Paris Cité, CNRS, Laboratoire de Physique Nucléaire et de Hautes Energies (LPNHE), Paris, France
Cherenkov Telescope Array Observatory gGmbH, Heidelberg, Germany
Institut für Physik, Humboldt-Universität zu Berlin, Berlin, Germany
Institut für Theoretische Physik, Weltraum- und Astrophysik, Ruhr-Universität Bochum, Germany
Department of Physics, TU Dortmund, Dortmund, Germany
Universität Erlangen-Nürnberg, Physikalisches Institut, Erlangen, Germany
Universität Hamburg, Institut für Experimentalphysik, Hamburg, Germany
Landessternwarte, Universität Heidelberg, Heidelberg, Germany
Max-Planck-Institut für Physik, München, Germany
Institut für Physik und Astronomie, Universität Potsdam, Germany
Institut für Astronomie und Astrophysik, Universität Tübingen, Tübingen, Germany
Institut für Theoretische Physik und Astrophysik, Universität Würzburg, Würzburg, Germany
Deutsches Elektronen-Synchrotron, Zeuthen, Germany
School of Physics, Aristotle University, Thessaloniki, Greece
National Technical University of Athens, Department of Physics, Athens, Greece
Faculty of Physics, National and Kapodestrian University of Athens, Athens, Greece
Bhabha Atomic Research Centre (BARC), Trombay-Mumbai, India
Saha Institute of Nuclear Physics, Kolkata, India
Tata Institute of Fundamental Research (TIFR), Mumbai, India
Dublin Institute for Advanced Studies, Dublin, Ireland
University College Dublin, Dublin, Ireland
Dublin City University, Dublin, Ireland
Department of Natural Sciences, The Open University of Israel, Ranaana, Israel
INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Bologna, Italy
INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Milano, Italy
INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Roma, Italy
INAF – Istituto di Astrofisica Spaziale e Fisica Cosmica di Palermo, Italy
INAF – Osservatorio Astrofisico di Arcetri, Firenze, Italy
INAF – Osservatorio Astronomico di Bologna, Italy
INAF – Osservatorio Astronomico di Brera, Milano, Italy
INAF – Osservatorio Astrofisico di Catania, Italy
INAF – Osservatorio Astronomico di Padova, Italy
INAF – Osservatorio Astronomico di Roma, Italy
INAF – Osservatorio Astrofisico di Torino, Italy
INAF – Osservatorio Astronomico di Trieste and INFN Sezione di Trieste, Udine, Italy
INAF – Telescopio Nazionale Galileo, San Miguel de La Palma, Spain run by the “Fundación Galileo Galilei - INAF, Fundación Canaria”, Rome, Italy
INAF – Istituto di Radioastronomia, Bologna, Italy
INAF – Institute of Advanced Study of Pavia, Pavia, Italy
INAF- IAPS Istituto di Astrofisica e Planetologia spaziali, Rome, Italy
INFN Sezione di Pisa, Italy
INFN Sezione di Bari, Italy
INFN Sezione di Torino, Italy
INFN Sezione di Napoli, Italy
INFN Sezione di Como / Milano Bicocca, Milano, Italy
INFN Sezione di Roma Tor Vergata, Italy
INFN Sezione di Perugia, Italy
INFN Sezione di Roma La Sapienza, Italy

INFN Dipartimento di Scienze Fisiche e Chimiche - Università degli Studi dell'Aquila and Gran Sasso Science Institute, L'Aquila, Italy
University of Trieste & INFN Sezione di Trieste, Italy
University of Udine and INFN Sezione di Trieste, Udine, Italy
Università di Siena and INFN, Siena, Italy
University of Bari and INFN Bari, Italy
Politecnico of Bari and INFN Bari, Italy
Dipartimento di Fisica, Università degli Studi di Padova and INFN Padova, Italy
Department of Physics and Mathematics, Aoyama Gakuin University, Fuchinobe, Japan
Faculty of Management Information, Yamanashi Gakuin University, Kofu, Japan
Department of Physical Science, Hiroshima University, Japan
Institute of Particle and Nuclear Studies, KEK (High Energy Accelerator Research Organization), Tsukuba, Japan
Division of Physics and Astronomy, Graduate School of Science, Kyoto University, Japan
Institute for Cosmic Ray Research, University of Tokyo, Kashiwa, Japan
Faculty of Science, Ibaraki University, Mito, Japan
School of Allied Health Sciences, Kitasato University, Sagamihara, Japan
Interactive Research Center of Science, Tokyo Institute of Technology, Tokyo, Japan
Department of Physics, Yamagata University, Japan
Institute of Space and Astronautical Science, JAXA, Sagamihara, Japan
Graduate School of Science and Engineering, Saitama University, Japan
Department of Applied Physics, University of Miyazaki, Japan
Department of Physics, Tokai University, Hiratsuka, Japan
Hiroshima Astrophysical Science Center, Hiroshima University, Higashi, Japan
Dept. of Physics, Kindai University, Kowakaei, Japan
Department of Physics, Konan University, Kobe, Japan
Department of Physics and Astrophysics, Nagoya University, Japan
Kobayashi-Maskawa Institute (KMI) for the Origin of Particles and the Universe, Nagoya University, Japan
Institute for Space-Earth Environmental Research, Nagoya University, Japan
Department of Earth and Space Science, Graduate School of Science, Osaka University, Toyonaka, Japan
Tokai University Hospital, Kanagawa, Japan
Graduate School of Science and Technology, Tokushima University, Japan
Institute of Socio-Arts and Sciences, University of Tokushima, Japan
Faculty of Science and Engineering, Waseda University, Tokyo, Japan
Department of Physics, Graduate School of Science, University of Tokyo, Tokyo, Japan
Riken Institute of Physical and Chemical Research, Wako, Saitama, Japan
Department of Physics, Rikkyo University, Tokyo Japan
Tohoku University, Astronomical Institute, Sendai, Japan
Division of Theoretical Astronomy, National Astronomical Observatory of Japan, Tokyo, Japan
Institute of Space and Astronautical Sciences, Japan Aerospace Exploration Agency, Sagamihara, Japan
Yukawa Institute for Theoretical Physics, Kyoto University, Kyoto, Japan
Dept. of Physics, Kinki University, Japan
Universidad Nacional Autónoma de México, Mexico City, Mexico
University of Namibia, Department of Physics, Windhoek, Namibia
Astronomical Institute Anton Pannekoek, University of Amsterdam, Amsterdam, The Netherlands
University of Groningen, KVI - Center for Advanced Radiation Technology, Groningen, The Netherlands
Radboud University Nijmegen, Nijmegen, The Netherlands
Department of Physics and Technology, University of Bergen, Bergen, Norway
University of Oslo, Department of Physics, Oslo, Norway
Faculty of Physics and Applied Computer Science, University of Lódź, Lódź, Poland
Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, Cracow, Poland
Faculty of Physics, University of Warsaw, Warsaw, Poland
Space Research Centre, Polish Academy of Sciences, Warsaw, Poland
The Henryk Niewodniczański Institute of Nuclear Physics, Polish Academy of Sciences, Cracow, Poland
Copernicus Astronomical Center, Polish Academy of Sciences, Warsaw, Poland
Faculty of Computer Science and Electronics and Telecommunications, AGH University of Science and Technology, Cracow, Poland
Academic Computer Centre CYFRONET AGH, Cracow, Poland
Toruń Centre for Astronomy, Nicolaus Copernicus University, Torun, Poland
University of Białystok, Faculty of Physics, Białystok, Poland

National Centre for nuclear research (Narodowe Centrum Badań Jądrowych), Otwock, Poland
University of Zielona Góra, Poland
Laboratory for Astroparticle Physics, University of Nova Gorica, Slovenia
Centre for Space Research, North-West University, Potchefstroom, South Africa
School of Physics, University of the Witwatersrand, Johannesburg, South Africa
University of the Free State, Bloemfontein, South Africa
University of Johannesburg, Department of Physics, Auckland Park, Johannesburg, South Africa
Departament de Física Quàntica i Astrofísica, Institut de Ciències del Cosmos, Universitat de Barcelona, IEEC-UB, Barcelona, Spain
CIEMAT, Madrid, Spain
Instituto de Astrofísica de Andalucía-CSIC, Granada, Spain
Instituto de Astrofísica de Canarias, La Laguna, Tenerife, Spain
Institute of Space Sciences (IEEC-CSIC) and Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain
Institut de Física d'Altes Energies (IFAE), The Barcelona Institute of Science and Technology, Barcelona, Spain
Grupo de Altas Energías, Universidad Complutense de Madrid, Madrid, Spain
Port d'Informació Científica, Bellaterra-Barcelona, Spain
Unitat de Física de les Radiacions, Departament de Física, and CERES-IEEC, Universitat Autònoma de Barcelona, Bellaterra-Barcelona, Spain
Grupo de Electronica, Universidad Complutense de Madrid, Madrid, Spain
Escuela Politécnica Superior de Jaén, Universidad de Jaén, Jaén, Spain
Lund Observatory, Lund, Sweden
Oskar Klein Centre, Department of Physics, Royal Institute of Technology (KTH), Stockholm, Sweden
Stockholm University, Stockholm, Sweden
Dept. of Physics and Astronomy, Uppsala University, Sweden
Linnaeus University, Växjö, Sweden
Laboratory for High Energy Physics, École Polytechnique Fédérale, Lausanne, Switzerland
ETH Zürich, Institute for Particle Physics, Zürich, Switzerland
University of Geneva, Département de Physique Nucléaire et Corpusculaire, Geneva, Switzerland
ISDC Data Centre for Astrophysics, Observatory of Geneva, University of Geneva, Versoix, Switzerland
Physik-Institut, Universität Zürich, Zürich, Switzerland
National Astronomical Research Institute of Thailand, Chiangmai, Thailand
Astronomical Observatory of Taras Shevchenko National University of Kyiv, Kyiv, Ukraine
Astronomical Observatory of Ivan Franko National University of Lviv, Lviv, Ukraine
Pidstryhach Institute for Applied Problems in Mechanics and Mathematics NASU, Lviv, Ukraine
Dept. of Physics and Centre for Advanced Instrumentation, Durham University, Durham, UK
King's College London, London, UK
Dept. of Physics and Astronomy, University of Leicester, Leicester, UK
The Astrophysics Research Institute, Liverpool John Moores University, Liverpool, UK
University of Liverpool, Oliver Lodge Laboratory, Liverpool, UK
School of Physics and Astronomy, University of Nottingham, Nottingham, UK
School of Physics & Astronomy, University of Edinburgh, Edinburgh, UK
Department of Physics and Astronomy, University of Sheffield, Sheffield, UK
Queen's University Belfast, School of Mathematics and Physics, Belfast, UK
Centre for Astrophysics Research, Science & Technology Research Institute, University of Hertfordshire, Hertfordshire, UK
STFC Rutherford Appleton Laboratory, Didcot, UK
School of Physics & Astronomy, University of Southampton, Southampton, UK
University of Oxford, Department of Physics, Oxford, UK
University of Bath, Bath, UK
Argonne National Laboratory, Argonne-IL, USA
Dept. of Physics & Astronomy, Barnard College, Columbia University, New York-NY, USA
Center for Relativistic Astrophysics and School of Physics, Georgia Institute of Technology, Atlanta-GA, USA
University of Hawai'i at Manoa, Honolulu-HI, USA
Department of Physics and Astronomy, Iowa State University, Ames-IA, USA
Department of Physics, Pittsburg State University, Pittsburg-KS, USA
Harvard-Smithsonian Center for Astrophysics, Cambridge-MA, USA
Department of Physics and Astronomy, University of California, Los Angeles-CA, USA
Santa Cruz Institute for Particle Physics and Department of Physics, University of California, Santa Cruz-CA, USA

Enrico Fermi Institute, University of Chicago, Chicago-IL, USA
Department of Physics and Astronomy, University of Utah, Salt Lake City-UT, USA
University of Wisconsin, Madison-WI, USA
Kavli Institute for Particle Astrophysics and Cosmology, Department of Physics and SLAC National Accelerator Laboratory, Stanford University, Menlo Park-CA, USA
University of Alabama in Huntsville, Center for Space Physics and Aeronomics Research, Huntsville-AL, USA
Astronomy Department, Adler Planetarium and Astronomy Museum, Chicago-IL, USA
Astrophysical Institute at Ohio University, Athens-OH, USA
Dept. of Astronomy and Astrophysics, Pennsylvania State University, University Park-PA, USA
Department of Physics, Purdue University, West Lafayette-IN, USA
University of California, Davis-CA, USA
Department of Physics and Astronomy and the Bartol Research Institute, University of Delaware, Newark-DE, USA
Department of Physics and Astronomy, University of Iowa, Iowa City-IA, USA
School of Physics and Astronomy, University of Minnesota, Minneapolis-MN, USA
Yale University, Department of Physics and Astronomy, New Haven-CT, USA
Texas Tech University, Lubbock-TX, USA
Department of Physics, Washington University, St. Louis-MO, USA

Dielectronic Recombination of Multicharged Ions:

Universität Giessen, Germany

Dielectronic Recombination of Multicharged Tungsten Ions:

Universität Giessen, Germany
University of Glasgow, United Kingdom
Columbia University, New York, USA

Dielectronic Recombination Rate Coefficients for Astrophysical Applications:

Columbia University, New York, USA
Universität Giessen, Germany

Dissociative Recombination of Molecular Ions:

Purdue Univ., USA
University of Central Florida, USA
University of Le Havre, France
Université Catholique de Louvain-La-Neuve, Belgium
Columbia University, New York, USA

Double Chooz:

CEA Saclay, IRFU, France
APC Paris, France
Subatech Nantes, France
IPHC Strasbourg, France
Technische Universität München, Germany
EKK Tübingen, Germany
RWTH Aachen, Germany
Argonne National Laboratory, USA
University of Chicago, USA
Drexel University, USA
University of Alabama, USA
Kansas State University, USA
Illinois Institute of Technology, USA
University of Notre Dame, USA
University of Tennessee, USA
Columbia University, USA
University of California at Davis, USA
MIT, USA
CIEMAT Madrid, Spain
Tohoku Gakuin University, Japan
Tohoku University, Sendai, Japan
Kobe University, Japan
Tokyo Institute of Technology, Japan
Tokyo Metropolitan University, Japan

Hiroshima Institute of Technology, Japan
RAS Moscow, Russia
NRC Kurchatov Institute Moscow, Russia
CBPF Rio de Janeiro, Brazil
UNICAMP, Brazil
UFABC, Brazil
Kitasato University, Japan

Dynamical x-ray imaging of C₆₀ at x-ray free-electron lasers (FELs):

LCLS/SLAC, Stanford, Palo Alto, CA, USA
Max Born Institut Berlin, Germany
MPI für medizinische Forschung Heidelberg, Germany
TU Berlin, Institut für Optik und Atomare Physik, Berlin, Germany
Argonne National Laboratory, Argonne, IL, USA
Kansas State University, Manhattan, KS, USA
Deutsches Elektronen Synchrotron (DESY), Hasylab, Hamburg, Germany
MPI für biophysikalische Chemie Göttingen, Germany
University of Connecticut, Storrs, CT, USA
Center for Free-Electron-Laser Science, DESY and Universität Hamburg, Germany
MPI für Physik komplexer Systeme Dresden, Germany
Institut für Theoretische Physik, TU Dresden, Germany
Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, Japan
Ohio State University, Department of Physics, Columbus, OH, USA
Physikalisch-Technische Bundesanstalt (PTB) Braunschweig, Germany

EBIT for Radioactive Isotope Charge Breeding:

TRIUMF, Vancouver, Canada

EMMI:

Université VI, Paris, France
GSI Darmstadt, Germany
Forschungszentrum Jülich, Germany
Universität Heidelberg, Germany
Universität Frankfurt, Germany
FIAS, Frankfurt, Germany
TU Darmstadt, Germany
Universität Münster, Germany
RIKEN, Japan
University of Tokyo, Japan
LBNL, Berkeley, USA
JINA, USA

Experimental Test of Special Relativity:

Johannes Gutenberg-Universität, Mainz, Germany
GSI Darmstadt, Germany

Fano Control:

Purdue University West Lafayette, USA

FLAIR:

Stefan Meyer Institut für subatomare Physik Wien, Austria
TU Wien, Austria
York University, Toronto
TRIUMF Vancouver, Canada
Aarhus University, Denmark
Ecole Normale Supérieure and Université P. et M. Curie Paris, France
Humboldt-Universität Berlin, Germany
GSI Darmstadt, Germany
TU Universität Dresden, Germany
Universität Frankfurt, Germany
MPI für Quantenoptik, Garching, Germany
Universität Gießen, Germany

Forschungszentrum Jülich, Germany
Universität Mainz, Germany
Universität Tübingen, Germany
KFKI Research Institute for Particle and Nuclear Physics Budapest, Hungary
Institute of Nuclear Research of the Hungarian Academy of Sciences, ATOMKI, Debrecen, Hungary
University of Debrecen, Hungary
Variable Energy Cyclotron Center Kolkata, India
Università di Brescia, Italy
Università degli Studi di Firenze, Italy
Istituto Nazionale di Fisica Nucleare Genova, Italy
RIKEN Wako, Japan
University of Tokyo, Japan
Vrije Universiteit Amsterdam, The Netherlands
FOM Institute for Atomic and Molecular Physics Amsterdam, The Netherlands
Warsaw University, Poland
Soltan Institute for Nuclear Studies, Warsaw, Poland
Institute of Spectroscopy of the RAS Troitsk, Russia
Institute of Experimental and Theoretical Physics Moscow, Russia
JINR Dubna, Russia
Moscow State University, Russia
D.I. Mendeleev Institute for Metrology St. Petersburg, Russia
St. Petersburg State University, Russia
St. Petersburg Nuclear Physics Institute, Russia
Manne Siegbahn Laboratory Stockholm, Sweden
Stockholm University, Sweden
Imperial College London, UK
Queen's University Belfast, UK
University of Wales Swansea, UK
Indiana University Bloomington, USA
Florida State University, USA
Harvard University Cambridge, USA
Pbar medical LLC Santa Fe, USA
University of New Mexico Albuquerque, USA
Texas A&M University College Station, USA

Galaxy and Mass Assembly (GAMA):

Anglo Australian Observatory
ESO
ICRAR/University of Western Australia/Australia
MPIK/Germany
ROE/UK
Swinburne University/Australia
University of St Andrews/UK
University of Cardiff/UK
University of Edinburgh/UK
University of Nottingham/UK
University of Central Lancashire/UK
University of Liverpool/UK
University of Sydney/Australia
University of Cape Town

Gamma-rays from Molecular Clouds:

University of Nagoya, Nagoya, Japan

GERDA:

Institute of Physics, Jagellonian University, Cracow, Poland
Institut für Kern- und Teilchenphysik, Technische Universität Dresden, Germany
Joint Institute for Nuclear Research, Dubna, Russia
European Commission, JRC-Geel, Geel, Belgium
INR Institute for Nuclear Research of the Russian Academy of Sciences, Moscow, Russia
ITEP Institute for Theoretical and Experimental Physics, Moscow, Russia

Kurchatov Institute National Research Center "Kurchatov Institute" Moscow, Russia
INFN Laboratori Nazionali del Gran Sasso and Gran Sasso Science Institute, Assergi, Italy
INFN Milano Bicocca and Universita Milano Bicocca, Italy
INFN Milano and Universita' degli Studi di Milano, Italy
INFN Laboratori Nazionali del Sud, Catania, Italy
INFN Padova, Padua, Italy
Max-Planck-Institut für Physik, München, Germany
Physik Department and Excellence Cluster Universe, Technische Universität München, Germany
Dipartimento di Fisica e Astronomia, Universita di Padova, Italy
Physikalisches Institut, Eberhard Karls Universität Tübingen, Germany
Physik Institut, University of Zürich, Schweiz

GLoBES:
Fermilab, USA
Virginia Tech, Blacksburg, USA
Universitaet Würzburg, Germany

H.E.S.:
National Academy of Sciences of the Republic of Armenia, Yerevan, Republic of Armenia
Yerevan Physics Institute, Yerevan, Armenia
School of Physical Sciences, University of Adelaide, Adelaide, Australia
Institut für Astro- und Teilchenphysik, Leopold-Franzens-Universität Innsbruck, Innsbruck, Austria
LUTH, Observatoire de Paris, PSL Research University, CNRS, Université Paris Diderot, Meudon, France
LPNHE, Laboratoire de Physique Nucléaire et de Hautes Energies, CNRS, Sorbonne Universités, UPMC Université Paris 06, Université Paris Diderot, Sorbonne Paris Cité, Paris, France
LUPM, Laboratoire Univers et Particules de Montpellier, Université Montpellier, CNRS/IN2P3, Montpellier, France
IRFU/DSM, CEA Saclay, Gif-Sur-Yvette, France
CPPM, Aix Marseille Université, CNRS/IN2P3, UMR 7346, Marseille, France
LAPP, Laboratoire d'Annecy-le-Vieux de Physique des Particules, Université Savoie Mont-Blanc, CNRS/IN2P3, Annecy-le-Vieux, France
CENBG, Université Bordeaux, CNRS/IN2P3, Centre d'Études Nucléaires de Bordeaux Gradignan, Gradignan, France
LLR, Laboratoire Leprince-Ringuet, Ecole Polytechnique, CNRS/IN2P3, Palaiseau, France
APC, AstroParticule et Cosmologie, Université Paris Diderot, CNRS/IN2P3, CEA/IRFU, Observatoire de Paris, Sorbonne Paris Cité, Paris, France
IPAG, Univ. Grenoble Alpes, CNRS, Grenoble, France
Landessternwarte, Universität Heidelberg, Heidelberg, Germany
DESY, Zeuthen, Germany
Institut für Physik und Astronomie, Universität Potsdam, Potsdam, Germany
Universität Hamburg, Institut für Experimentalphysik, Hamburg, Germany
Institut für Physik, Humboldt-Universität zu Berlin, Berlin, Germany
Institut für Astronomie und Astrophysik, Universität Tübingen, Tübingen, Germany
Friedrich-Alexander-Universität Erlangen-Nürnberg, Centre for Astroparticle Physics, Erlangen, Germany
Institut für Theoretische Physik, Lehrstuhl IV: Weltraum und Astrophysik, Ruhr-Universität Bochum, Bochum, Germany
Dublin Institute for Advanced Studies, Dublin, Ireland
Department of Physics, Rikkyo University, Tokyo, Japan
Japan Aerospace Exploration Agency (JAXA), Institute of Space and Astronautical Science (ISAS), Sagamihara, Japan
University of Namibia, Department of Physics, Windhoek, Namibia
Astronomical Observatory, The University of Warsaw, Warsaw, Poland
Instytut Fizyki Jądrowej PAN, Kraków, Poland
Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences, Warsaw, Poland
Obserwatorium Astronomiczne, Uniwersytet Jagiellonski, Kraków, Poland
Centre for Astronomy, Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University, Torun, Poland
School of Physics, University of the Witwatersrand, Johannesburg, South Africa
Department of Physics, University of the Free State, Bloemfontein, South Africa
Centre for Space Research, North-West University, Potchefstroom, South Africa
Oskar Klein Centre, Department of Physics, Stockholm University, Albanova University Center, Stockholm, Sweden
Department of Physics and Electrical Engineering, Linnaeus University, Växjö, Sweden
GRAPPA, Anton Pannekoek Institute for Astronomy, University of Amsterdam, The Netherlands

GRAPPA, Institute of High-Energy Physics, University of Amsterdam, Science Park, Amsterdam, The Netherlands
Department of Physics and Astronomy, The University of Leicester, Leicester, United Kingdom

HAWC:

Instituto de Física, Universidad Nacional Autónoma de México, Mexico City, Mexico
Instituto de Geofísica, Universidad Nacional Autónoma de México, Mexico City, Mexico
Centro de Investigación en Computación, Instituto Politécnico Nacional, Mexico City, Mexico
Universidad Autónoma del Estado de Hidalgo, Pachuca, Hidalgo, Mexico
Instituto de Ciencias Nucleares, Universidad Nacional Autónoma de México, Mexico City, Mexico
Universidad Autónoma de Chiapas, Tuxtla Gutiérrez, Chiapas, Mexico
Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, Mexico
Universidad Politécnica de Pachuca, Hidalgo, Mexico
Departamento de Física,
Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City, Mexico
Instituto Nacional de Astrofísica, óptica y Electrónica, Santa María Tonantzintla, Puebla, Mexico
Facultad de Ciencias Físico Matemáticas, Benemérita Universidad Autónoma de Puebla, Ciudad Universitaria, Puebla, Mexico
Departamento de Física, Centro Universitario de Ciencias Exactas e Ingenierías, Universidad de Guadalajara, Guadalajara, Jalisco, Mexico
Instytut Fizyki Jadrowej im Henryka Niewodniczanskiego Polskiej Akademii Nauk, IFJ-PAN, Krakow, Poland
Department of Physics & Astronomy, Michigan State University, East Lansing-MI, USA
Department of Physics & Astronomy, University of Utah, Salt Lake City-UT, USA
Department of Physics, University of Maryland, College Park-MD, USA
Department of Physics, Michigan Technological University, Houghton-MI, USA
Department of Physics & Astronomy, University of Rochester, Rochester-NY, USA
Wisconsin IceCube Particle Astrophysics Center (WIPAC) and University of Wisconsin-Madison, Madison-WI, USA
Physics Division, Los Alamos National Laboratory, Los Alamos-NM, USA
School of Physics, Astronomy & Computational Sciences, George Mason University, Fairfax- VA, USA
Physics Department, Colorado State University, Fort Collins-CO, USA
Department of Physics & Astronomy, University of California, Irvine, Irvine-CA, USA
Department of Physics & Astronomy, University of New Mexico, Albuquerque-NM, USA
School of Physics and Center for Relativistic Astrophysics, Georgia Institute of Technology, Atlanta-GA, USA
Department of Physics, Pennsylvania State University, University Park-PA, USA
Santa Cruz Institute for Particle Physics, University of California, Santa Cruz, Santa Cruz-CA, USA

Herschel-ATLAS:

CALTECH/USA
CEA/F
CNRS/F
CFA/USA
ESA
ESO
NASA
IAC/Spain
IAP/F
Imperial College London
Instituto Nazionale di Astrofisica, Osservatorio Astronomico di Padova/Italy
IPAC/USA
IRAM
JPL/USA
MPIK/Germany
Open University/UK
ROE/UK
SISSA/I
University of Bonn/Germany
University of California/USA
University of Ghent/Belgium
University of St Andrews/UK
University of Cardiff/UK

University of Edinburgh/UK
University of Nottingham/UK
University of Oxford/UK
University of Central Lancashire/UK
University of Liverpool/UK
University of Sydney/Australia/Australia

Herschel-HiGal:

ASIS/I
CALTECH/USA
CEA/F
CITA/Canada
CNRS/F
CFA/USA
ESA
ESO
NASA
IAC/Spain
IAP/F
INAF/I
Imperial College London
Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Padova/Italy
IPAC/USA
IRAM
JPL/USA
MPIK/Germany
Open University/UK
ROE/UK
SISSA/I
University College London
University of Bonn/Germany
University of California/USA
University of Ghent/Belgium
University of St Andrews/UK
University of Cardiff/UK
University of Edinburgh/UK
University of Nottingham/UK
University of Oxford/UK
University of Central Lancashire/UK
University of Liverpool/UK
University of Sydney/Australia/Australia
University of Toronto/Canada

High Energy Neutrinos:

Nanjing University, China

HITRAP:

TU Wien, Austria
GANIL Caen, France
GSI Darmstadt, Germany
Universität Mainz, Germany
KVI Groningen, The Netherlands
Jagellonian University Cracow, Poland
University of Stockholm, Sweden
Imperial College London, UK

Hochauflösende Laserspektroskopie hochgeladener Ionen: Zeitvariation der Feinstrukturkonstante:
Physikalisch Technische Bundesanstalt, Braunschweig, Germany

Intense Electron Pulses for Electron Cooling and Recombination Studies in the HITRAP Cooler Trap:
GSI Darmstadt, Germany

Invisibles EU FP7 ITN:

Universidad Autonoma de Madrid, Spain
University of Durham, UK
Aarhus Universitet, Danemark
CNRS, France
University of Göttingen, Germany
INFN, Italy
Universidad de Barcelona, Spain
Universidad de Valencia, Spain
University of Zürich, Switzerland
University of Southampton, UK

ISAPP:

Aarhus University, Denmark
APC Paris (Paris 7), France
Orsay(Paris XI), France
Technical University Munich, Germany
Heidelberg University, Germany
MPI für Physik, München, Germany
Institute for Experimental Nuclear Physics at Karlsruhe University, Germany
Institute for Nuclear Physics at Forschungszentrum Karlsruhe, Germany
Weizmann Institute, Israel
Bari University, Italy
Ferrara University, Italy
Genova University, Italy
Milano University, Italy
MilanoBicocca University, Italy
Napoli University, Italy
Padova University, Italy
Roma Tor Vergata University, Italy
Torino University, Italy
Laboratori Nazionali del Gran Sasso, Italy
Astroparticle Group at the Trondheim University, Norway
INR, Russia
RRC Kurchatov Laboratory, Russia
Nova Gorica University, Slovenia
IFIC/CSIC-Valencia University, Spain
Santiago de Compostela University, Spain
Theor. Phys. Department at the Universidad Autonoma de Madrid, Spain
Cops Group at the Phys. Dept. of the Stockholm University, Sweden
Oxford University, United Kingdom

ISOLTRAP:

Katholieke Universiteit Leuven Heverlee, Belgium
CSNSM-IN2P3-CNRS, France
Universität Greifswald, Germany
GSI Darmstadt, Germany
TU Dresden, Germany
CERN Geneva, Switzerland
University of Manchester, UK
Michigan State University, USA
University of Istanbul, Turkey

Laser-induced electron diffraction (LIED) coincidence measurements with reaction microscopes:

ICFO Barcelona, Spain

LaSpec:

Katholieke Universiteit Leuven Heverlee, Belgium
University of Jyväskylä, Finland
CNRS Orsay, France
GSI Darmstadt, Germany

Universität München, Germany
Universität Mainz, Germany
Universität Tübingen, Germany
CERN Geneva, Switzerland
University of Manchester, UK
Lawrence Livermore National Laboratory, USA
Pacific Northwest National Laboratory Richland, USA

LHCb:

Centro Brasileiro de Pesquisas Físicas (CBPF), Rio de Janeiro, Brazil
Universidade Federal do Rio de Janeiro (UFRJ), Rio de Janeiro, Brazil
Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Rio de Janeiro, Brazil
Center for High Energy Physics, Tsinghua University, Beijing, China
University of Chinese Academy of Sciences, Beijing, China
School of Physics and Technology, Wuhan University, Wuhan, China
Institute of Particle Physics, Central China Normal University, Wuhan, Hubei, China
Departamento de Fisica, Universidad Nacional de Colombia, Bogota, Colombia
LAPP, Université de Savoie, CNRS/IN2P3, Annecy-Le-Vieux, France
Clermont Université, Université Blaise Pascal, CNRS/IN2P3, LPC, Clermont-Ferrand, France
CPPM, Aix-Marseille Université, CNRS/IN2P3, Marseille, France
LAL, Université Paris-Sud, CNRS/IN2P3, Orsay, France
LPNHE, Université Pierre et Marie Curie, Université Paris Diderot, CNRS/IN2P3, Paris, France
Fakultät Physik, Technische Universität Dortmund, Dortmund, Germany
Physikalisches Institut, Ruprecht-Karls-Universität Heidelberg, Heidelberg, Germany
Institut für Physik, Universität Rostock, Rostock, Germany
I. Physikalischs Institut, RWTH Aachen University, Aachen, Germany
School of Physics, University College Dublin, Dublin, Ireland
Sezione INFN di Bari, Bari, Italy
Sezione INFN di Bologna, Bologna, Italy
Sezione INFN di Cagliari, Cagliari, Italy
Sezione INFN di Ferrara, Ferrara, Italy
Sezione INFN di Firenze, Firenze, Italy
Laboratori Nazionali dell'INFN di Frascati, Frascati, Italy
Sezione INFN di Genova, Genova, Italy
Sezione INFN di Milano Bicocca, Milano, Italy
Sezione INFN di Milano, Milano, Italy
Sezione INFN di Padova, Padova, Italy
Sezione INFN di Pisa, Pisa, Italy
Sezione INFN di Roma Tor Vergata, Roma, Italy
Sezione INFN di Roma La Sapienza, Roma, Italy
Henryk Niewodniczanski Institute of Nuclear Physics Polish Academy of Sciences, Kraków, Poland
AGH - University of Science and Technology, Faculty of Physics and Applied Computer Science, Kraków, Poland
National Center for Nuclear Research (NCBJ), Warsaw, Poland
Horia Hulubei National Institute of Physics and Nuclear Engineering, Bucharest-Magurele, Romania
Petersburg Nuclear Physics Institute (PNPI), Gatchina, Russia
Institute of Theoretical and Experimental Physics (ITEP), Moscow, Russia
Institute of Nuclear Physics, Moscow State University (SINP MSU), Moscow, Russia
Institute for Nuclear Research of the Russian Academy of Sciences (INR RAN), Moscow, Russia
National Research Centre Kurchatov Institute, Moscow, Russia
Budker Institute of Nuclear Physics (SB RAS) and Novosibirsk State University, Novosibirsk, Russia
Institute for High Energy Physics (IHEP), Protvino, Russia
Yandex School of Data Analysis, Moscow, Russia
Universitat de Barcelona, Barcelona, Spain
Universidad de Santiago de Compostela, Santiago de Compostela, Spain
Instituto de Fisica Corpuscular (IFIC), Universitat de Valencia-CSIC, Valencia, Spain
European Organization for Nuclear Research (CERN), Geneva, Switzerland
Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland
Physik-Institut, Universität Zürich, Zürich, Switzerland
Nikhef National Institute for Subatomic Physics, Amsterdam, The Netherlands
Nikhef National Institute for Subatomic Physics and VU University Amsterdam, Amsterdam, The Netherlands

KVI - University of Groningen, Groningen, The Netherlands
Celal Bayar University, Manisa, Turkey
NSC Kharkiv Institute of Physics and Technology (NSC KIPT), Kharkiv, Ukraine
Institute for Nuclear Research of the National Academy of Sciences (KINR), Kyiv, Ukraine
University of Birmingham, Birmingham, UK
H.H. Wills Physics Laboratory, University of Bristol, Bristol, UK
Cavendish Laboratory, University of Cambridge, Cambridge, UK
Department of Physics, University of Warwick, Coventry, UK
STFC Rutherford Appleton Laboratory, Didcot, UK
School of Physics and Astronomy, University of Edinburgh, Edinburgh, UK
School of Physics and Astronomy, University of Glasgow, Glasgow, UK
Oliver Lodge Laboratory, University of Liverpool, Liverpool, UK
Imperial College London, London, UK
School of Physics and Astronomy, University of Manchester, Manchester, UK
Department of Physics, University of Oxford, Oxford, UK
Massachusetts Institute of Technology, Cambridge, MA, United States
University of Cincinnati, Cincinnati, OH, United States
University of Maryland, College Park, MD, United States
Syracuse University, Syracuse, NY, United States

Looking inside the molecular breakup with XUV-pump-XUV-probe transient-absorption spectroscopy:

FLASH/DESY, Hamburg, Germany
Department of Chemistry, UC Berkeley, Berkeley CA, USA
Nanyang Technological University, Singapore
ETH Zürich, Switzerland
Theoretische Chemie, Universität Heidelberg, Germany

Low Energy Storage Rings:

National Institute of Radiological Sciences, Chiba, Japan
University of Kyoto, Japan

MATS:

University of Brussels, Belgium
University of Jyväskylä, Finland
CNRS Orsay/Paris, France
CENBG/IN2P3, Orsay, France
Universität Greifswald, Germany
Universität Erlangen, Germany
GSI Darmstadt, Germany
Universität Mainz, Germany
Universität Gießen, Germany
Universität München, Germany
Variable Energy Cyclotron Centre Kolkata, India
Raniganj Girls' College, India
St. Petersburg Nuclear Physics Institute, Russia
St. Petersburg State University, Russia
Universidad de Huelva, Spain
University of Granada, Spain
University of Valencia CSIC, Spain
CIEMAT, Spain
UPC, Spain
Stockholm University, Sweden
CERN Geneva, Switzerland
Lawrence Livermore National Laboratory, USA
Michigan State University, USA
Louisiana State University, USA

Molecular AttoClock:

Universität Frankfurt, Germany
East China Normal University Shanghai, China
Kansas State University Manhattan, KS, USA

Nucifer:

CEA Saclay, DSM/IRFU, France
CEA Saclay, DEN, France
CEA Arpajon, DAM, DIF, France
SUBATECH Nantes, France

nuClock:

Technische Universität Wien, Austria
Physikalisch-Technische Bundesanstalt, Braunschweig, Germany
Ludwig-Maximilians-Universität München, Germany
MPI für Quantenoptik, Garching, Germany
Ruprecht-Karls-Universität Heidelberg, Germany
Jyväskylän Yliopisto, Jyväskylä, Finland
Toptica Photonics AG, Gräfelfing, Germany

NUSTAR:

University of Leuven, Belgium
Niels Bohr Institute Copenhagen, Denmark
University of Jyväskylä, Finland
IRES Strasbourg, France
GANIL Caen, France
CEA/Saclay Gif-sur-Yvette, France
CSNS11 Orsay, France
CNSM Orsay, France
Universität Gießen, Germany
GSI Darmstadt, Germany
Forschungszentrum Jülich, Germany
Universität Köln, Germany
TU München Garching, Germany
TU Darmstadt, Germany
Hahn-Meitner-Institut Berlin, Germany
Universität Greifswald, Germany
Universität Tübingen, Germany
Universität Mainz, Germany
Forschungszentrum Karlsruhe, Germany
Forschungszentrum Rossendorf, Germany
INFN Padova, Italy
INFN Legnaro, Italy
Politecnico di Milano, Italy
INFN Milano, Italy
ENEA Bologna, Italy
RCNP Osaka, Japan
University of Tokyo, Japan
RIKEN Wako, Japan
Institute of Nuclear Physics Cracow, Poland
University of Sevilla, Spain
University of Huelva, Spain
IFIC Valencia, Spain
Kungliga Tekniska Högskolan Stockholm, Sweden
Uppsala University, Sweden
Lund University, Sweden
Universität Basel, Switzerland
CERN Geneva, Switzerland
University of Surrey Guildford, UK
University of Manchester, UK
University of Liverpool, UK
CCLRC Daresbury Laboratory, UK
Argonne National Laboratory, USA
Los Alamos National Laboratory, USA
Pacific Northwest National Laboratory Richland, USA

University of Notre Dame, USA
Oak Ridge National Laboratory, USA

PETRA III - DESY "Photonic interactions of highly charged ions in the X-ray region":
DESY Hamburg, Germany

Photocathodes for Cold Intense Electron Beams:
Rzhanov Institute of Semiconductor Physics, RAS, Novosibirsk, Russia

Pulsar wind hydrodynamics:
MEPHI, Moscow, Russia
Rikkyo University, Tokyo, Japan

Radiative Emission from Trapped Polyatomic Molecules:
Max-Planck-Institut für Astronomie, Germany
Karlsruhe Institute of Technology, Germany

Reaktionsmikroskopie für die Dosimetrie:
Physikalisch Technische Bundesanstalt, Braunschweig, Germany

SFB Isolated quantum systems and universality in extreme conditions:
Heidelberg University, Germany

SHIPTRAP:
GSI Darmstadt, Germany
TU Darmstadt, Germany
Helmholtz-Institut Mainz, Germany
Universität Mainz, Germany
Universität Greifswald, Germany
Universität Gießen, Germany
St. Petersburg Nuclear Physics Institute Gatchina, Russia
LMU München, Germany
Universidad Granada, Spain

Signatures and control of strong-field dynamics:
Physikalisch-Chemisches Institut, Universität Heidelberg, Germany

SPARC:
Centro Atomico Bariloche, Argentina
TU Wien, Austria
TRIUMF National Laboratory Vancouver, Canada
University of Manitoba Winnipeg, Canada
York University Toronto, Canada
Institute of Modern Physics, Chinese Academy of Sciences, China
China Institute of Atomic Energy Beijing, China
Institute of Applied Physics and Computational Mathematics Beijing, China
Fudan University Shanghai, China
Institute of Modern Physics Lanzhou, China
Jilin University, China
Lanzhou University, China
University of Science and Technology of China Hefei, China
Wuhan Institute of Physics and Mathematics, China
Northwest Normal University Lanzhou, China
Ruder Boskovic Institute Zagreb, Croatia
Institute of Physics, Czech Academy of Sciences, Czech Republic
University of Aarhus, Denmark
Cairo University Beni-Suef, Egypt
Institut des NanoSciences de Paris, France
Laboratoire Kastler-Brossel Paris, UPMC/ENS, France
CIMAP Caen, France
CIRIL-Ganil Caen, France
Ecole Normale Supérieure Lyon, France
Institut de Physique Nucléaire de Lyon, France
Groupe de Physique des Solides Paris, France

Deutsches Elektronen-Synchroton DESY, Germany
Humboldt-Universität Berlin, Germany
Hahn-Meitner-Institut Berlin, Germany
Universität Jena, Germany
Universität Greifswald, Germany
Forschungszentrum Jülich, Germany
Universität Freiburg, Germany
GSI Darmstadt, Germany
Universität Gießen, Germany
TU München, Germany
LMU München, Germany
TU Dresden, Germany
Universität Tübingen, Germany
Universität Frankfurt am Main, Germany
Universität Mainz, Germany
Universität Kassel, Germany
TU Clausthal, Germany
Universität Heidelberg, Germany
TU Darmstadt, Germany
PTB Braunschweig, Germany
Universität Erlangen, Germany
University of Crete and IESL-FORTH Heraklion, Greece
Institute of Nuclear Research Debrecen, Hungary
Tata Institute of Fundamental Research Mumbai, India
Vaish College Rohtak, India
Nuclear Science Centre New Delhi, India
Bhabha Atomic Research Centre Mumbai, India
INFN Catania, Italy
University of Tokyo, Japan
RIKEN Wako, Japan
Hashemite University Zarqa, Jordan
Universidad Nacional Autónoma de México Cuernavaca, Mexico
Reijksuniversiteit Groningen, The Netherlands
B Z University Multan, Pakistan
Instituto Peruano de Energía Nuclear, Peru
Swietokrzyska Academy Kielce, Poland
Jagellonian University Cracow, Poland
Warsaw University, Poland
Institute of Nuclear Physics of Polish Academy of Sciences Cracow, Poland
The Soltan Institute for Nuclear Studies Swierk, Poland
Universidade de Lisboa, Portugal
National Institute for Laser, Plasma & Radiation Physics, Romania
Institute for Space Sciences – INFLPR, Romania
National Institute for Physics and Nuclear Engineering Bucharest, Romania
RRC “Kurchatov Institute”, Russia
Peterburg Nuclear Physics Institute, Russia
Lebedev Physical Institute Moscow, Russia
St. Petersburg State University, Russia
Institute of Metrology for Time and Space Mendelevoo, Russia
Institute of Spectroscopy of the RAS Troitsk, Russia
Moscow State University, Russia
V.G. Khlopin Radium Institute St. Petersburg, Russia
Institute of Physics Belgrade, Serbia and Montenegro
UNED – Universidad a Distancia, Spain
CIMAT, Spain
Hospital Universitario La Paz, Spain
University of Madrid, Spain
CSIC Madrid, Spain
Chalmers University of Technology and Göteborg University, Sweden

Stockholm University, Sweden
Mid-Sweden University Sundsvall, Sweden
Lund University, Sweden
Manne Siegbahn Laboratory Stockholm, Sweden
CERN Geneva, Switzerland
University of Fribourg, Switzerland
Universität Basel, Switzerland
Queen's University Belfast, UK
University of Durham, UK
Old Dominion University, USA
East Carolina University, USA
Lawrence Livermore National Laboratory, USA
Kansas State University, USA
Lawrence Berkeley National Laboratory, USA
Georgia State University Atlanta, USA
University of Missouri Rolla, USA
Oak Ridge National Laboratory, USA
Western Michigan University Kalamazoo, USA
Harvard-Smithsonian Center for Astrophysics Cambridge, USA
Brown University Providence, USA
University of Texas Austin, USA
Columbia University New York, USA
Heat Physics Department of the Uzbek Academy of Sciences, Uzbekistan

Spectroscopy of highly charged technetium in white dwarfs:
Tübingen University, Germany

SPICA:

Cardiff University (UK)
Service d'Astrophysique, Saclay (France)
Centre d'Etudes Spatiale des Rayonnements, OMP-UPS, Toulouse (France)
Departamento de Astrofisica Molecular e InfraRoja, Madrid (Spain)
DLR Koeln (Germany)
ESA/ESTEC Noordwijk (The Netherlands)
Imperial College, London
Institut d'Astrophysique de Paris (France)
Institut d'Astrophysique Spatiale, Orsay (France)
Instituto de Astrofisica de Canarias (Spain)
Instituut voor Sterrenkunde, Katholieke Universiteit, Leuven (Belgium)
Istituto di Fisica dello spazio Interplanetario (Italy)
Japan Aerospace Exploration Agency (Japan)
Korea Astronomy and Space Science Institute (Korea)
Laboratoire d'Astrophysique de Marseille (France)
Leiden Observatory, University of Leiden (The Netherlands)
MPI fuer Astronomie Heidelberg (Germany)
MPI fuer Extraterrestrische Physik Garching (Germany)
Mullard Space Science Laboratory (UK)
National Astronomical Observatory of Japan, Japan
Netherlands Institute for Space Research (The Netherlands)
Observatoire de Paris (France)
Rutherford Appleton Laboratory, Chilton (UK)
Seoul National University, Seoul (Korea)
Tokyo Institute of Technology (Japan)
UK Astronomy Technology Centre, Edinburgh (UK)
University of Central Lancashire, Preston (UK)
University of Lethbridge (Canada)
Universita di Roma (Italy)
University of Oxford (UK)
University of Cambridge (UK)
University of Tokyo (Japan)

Stereo:

CEA Saclay, DSM/IRFU, France
ILL Grenoble, France
LAPP Annecy, France
LPSC Grenoble, France

Superradiance excitation with free-electron lasers:

CFEL, Hamburg, Germany

TIFF: Trapped Ion Fragmentation at FLASH, DESY:

University of Aarhus, Denmark
Universität Hamburg, Germany
Weizmann Institute of Science, Rehovot, Israel

Time variation of fundamental constants:

PTB, Braunschweig, Germany
New South Wales University, Sidney, Australia
University of Maryland, USA

Time-of-flight Mass Spectroscopy:

National Superconducting Cyclotron Laboratory, East Lansing, MI, USA

Time-resolved buildup of Fano resonances:

Universität Wien, Austria
Kansas State University, Manhattan, KS, USA

Time-resolved Four-Wave-Mixing Spectroscopy for Inner-Valence Transitions:

Centre for Theoretical Atomic, Molecular and Optical Physics, Queen's University Belfast, United Kingdom

TRIUMF-EBIT for mass measurements using highly charged ions:

TRIUMF, Vancouver, Canada

VHE Gamma-Ray sources:

University of Adelaide, Australia

XENON Collaboration:

Laboratori Nazionali del Gran Sasso, Italy
University of Bologna and INFN-Bologna, Italy
Columbia University, USA
University of Coimbra, Portugal
Rice University, USA
Johannes Gutenberg Universität Mainz, Germany
Wilhelms-Universität Münster, Germany
Nikhef and the University of Amsterdam, Netherlands
NYU, Abu Dhabi
Purdue University, USA
SUBATECH, France
University of Torino and INFN-Torino, Italy
Weizmann Institute of Science, Israel
University of Zurich, Switzerland
University of Freiburg, Germany
Rensselaer Polytechnic Institute, USA
University of Chicago, USA
University of California, San Diego, USA
University of California, Los Angeles, USA
Stockholm University, Sweden

XFEL REMI bei DESY:

Universität Frankfurt, Germany
DESY Hamburg, Germany

X-Ray Free Electron Laser spectroscopy with highly charged ions:

Lawrence Livermore National Laboratory, Livermore, California, USA
NASA Goddard Space Flight Center, Greenbelt, Maryland, USA
Ulsan National Institute of Science and Technology, Ulsan, South Korea

X-Ray Metrology with highly charged ions:

Jena University, Germany

Helmholtz Zentrum Jena, Germany

Petra-III (DESY), Hamburg, Germany

X-Ray microcalorimeters:

Heidelberg University, Germany