

# Publications 2011

## Journals Articles

- Aaij, R., Adeva, B., Adinolfi, M. et al. the LHCb Collaboration (2011): Measurement of  $J/\psi$  production in  $pp$  collisions at  $\sqrt{s}=7$  TeV. *European Physical Journal C - Particles and Fields*, 71(5): 1645. doi:10.1140/epjc/s10052-011-1645-y.
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- Aaron, F. D., Alexa, C., Andreev, V. et al. the H1 Collaboration (2011): Measurement of  $D^{*+/-}$  meson production and determination of  $F_2^{ce}$  at low  $Q^2$  in deep-inelastic scattering at HERA. *European Physical Journal C*, 71(10): 1769. doi:10.1140/epjc/s10052-011-1769-0.
- Aaron, F. D., Alexa, C., Andreev, V. et al. the H1 Collaboration (2011): Measurement of the diffractive longitudinal structure function  $F_L^D$  at HERA. *European Physical Journal C*, 71(12): 1836. doi:10.1140/epjc/s10052-011-1836-6.
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# Invited Talks 2011

## At Conferences and Symposia

Abingdon, Great Britain, Rutherford Appleton Laboratory, Christmas Meeting of the High Power Laser Science Community (14.12.-16.12.2011)

**Kirk, J.G.:**

*Drilling for Pairs.*

Al Ain, United Arab Emirates, Third UAE Physics Symposium (05.05.2011)

**Salamin, Y. I.:**

*Proton Acceleration by a Chirped Laser Pulse.*

Allahabad, India, Neutrinos in Physics, Astrophysics and Cosmology, "NuHoRIzons IV" (23.02.-25.02.2011)

**Barry, J.:**

*Neutrino mass observables constraining models of neutrino mass.*

**Zhang, He:**

*Extra-dimensional seesaw models.*

Alushta, Ukraine, International Workshop on Beam Cooling and Related Topics, COOL11 (12.09.-16.09.2011)

**Wolf, A.:**

*Low-Energy Ion Beam Storage and eV Electron Cooling.*

Ashtarak, Armenia, Laser Physics 2011 (11.10.-14.10.2011)

**Hatsagortsyan, K. Z.:**

*Coulomb Focusing at Above-threshold Ionization in Mid-infrared Strong Laser Fields.*

Assergi, LNGS, Italy, Workshop on Beyond Three Family Neutrino Oscillations (03.05.-04.05.2011)

**Schwetz-Mangold, T.:**

*Phenomenological analysis related to schemes with sterile neutrinos.*

Atlanta, USA, 42<sup>nd</sup> Annual Meeting of the APS Division of Atomic, Molecular and Optical Physics (DAMOP) (13.06.-17.06.2011)

**Crespo-López-Urrutia, J.R.:**

*X-ray photoionization and resonant scattering of highly charged ions in the laboratory.*

**Ullrich, J.:**

*Ultrafast dynamics: Pump-probe experiments at FELs.*

Bad Honnef, Germany, 479. WE-Heraeus Seminar, Physics at LHCb (26.04.-29.04.2011)

**Schmelling, M.:**

*LHCb Input for Monte Carlo Tuning.*

Bad Honnef, Germany, 487. Wilhelm and Else Heraeus Seminar: Astrophysics, Clocks and Fundamental Constants ACFC 2011(18.07.-21.07.2011)

**Blaum, K.:**

*Precision mass and g-factor measurements for fundamental studies.*

Bad Honnef, Germany, KHuK Jahrestagung (09.12.2011)

**Lindner, M.:**

*Erste Ergebnisse von Double Chooz.*

Bad Honnef, Germany, WE-Heraeus Seminar on Micro & macro-cavities in classical and non-classical light (30.10.-03.11.2011)

**Evers, J.:**

*Pathway interference in arrays and chains of microresonators.*

Barcelona, Spain, High Energy Phenomena in Relativistic Outflows III (27.06.-01.07.2011)

**Barkov, M.V.:**

*Close binary progenitors of gamma-ray bursts and hypernovae.*

Beijing, China, International Summer School on Subatomic Physics (29.08.-30.08.2011)

**Blaum, K.:**

*High-precision mass measurements with storage rings and Penning traps.*

- Beijing, China, MHD and Kinetic Processes in Laboratory, Space and Astrophysical Plasmas (04.06.–10.06.2011)  
**Kirk, J.G.:**  
*Particle acceleration at Relativistic Shocks.*
- Beijing, China, Quantum Optics and New Materials IV (27.01.-30.01.2011)  
**Evers, J.:**  
*Pathway interference in arrays of coupled microresonators.*  
**Pálffy, A.:**  
*Nuclear coherent population transfer with x-ray laser pulses.*
- Beijing, China, Sino-German Symposium on Laser Acceleration and Applications of Lasers at Accelerators (05.12.-08.12.2011)  
**Di Piazza, A.:**  
*Tests of classical and quantum electrodynamics with strong laser fields.*
- Beijing, China, The Dark Side of the Universe (26.09.-30.09.2011)  
**Lindner, M.:**  
*keV sterile neutrinos as dark matter.*  
**XENON100.**
- Beijing, China, 32<sup>nd</sup> International Cosmic Ray Conference (11.08.-18.08.2011)  
**Aharonian, F.A.:**  
*Probing Cosmic Ray Accelerators With Gamma Rays and Neutrinos.*
- Beijing, China, Tsinghua University, Workshop Application of Germanium Detectors in Fundamental Research (24.03.-26.03.2011)  
**Knöpfle K. T.:**  
*Shielding Strategies.*  
**Schwingenheuer, B.:**  
*Overview over Underground Laboratories.*
- Belfast, UK, 17<sup>th</sup> International Conference on Atomic Processes in Plasmas (18.07.-22.07.2011)  
**Crespo-López-Urrutia, J.R.:**  
*Photoionizing highly charged ions with synchrotron radiation.*
- Belfast, UK, 27<sup>th</sup> International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC) (27.07.-02.08.2011)  
**Kellerbauer, A.:**  
*Negative osmium ions: Spectroscopy and fundamental applications.*  
**Müller, C.:**  
*Electron recombination in dense photonic, electronic and atomic environments.* (Progress Report)  
**Pflüger, Th.:**  
*A kinematically complete (e,2e)-experiment on small rare gas clusters.*
- Berlin, Germany, AttoFEL Network Meeting (01.02.–02.02.2011)  
**Pfeifer, T.:**  
*Attosecond and Free-Electron Laser Science and Technology at MPIK Heidelberg.*
- Berlin, Germany, The 5<sup>th</sup> International Symposium “Atomic Cluster Collisions” (ISACC 2011) (20.07.-25.07.2011)  
**Ullrich, J.:**  
*FELs: Imaging clusters, aerosols, viruses and nanocrystals.*
- Bern, Switzerland. I.S.S.I. Workshop "Fermi shock acceleration process: from non-relativistic to ultra-relativistic shocks" (14.02.2011–18.02.2011)  
**Kirk, J.G.:**  
*Radiative signatures of first-order Fermi acceleration at relativistic shocks.*
- Blacksburg, Virginia, USA, 4<sup>th</sup> International Neutrino Summer School (10.07.-21.07.2011)  
**Rodejohann, W.:**  
*Neutrino Mass Models.*
- Blacksburg, Virginia, USA, Sterile Neutrinos at the Cross Road (SNAC2011) (25.09.-28.09.2011)  
**Schwetz-Mangold, T.:**  
*Global Oscillation Fits and Sterile Neutrinos.*

- Blois, France, 23<sup>rd</sup> Rencontres de Blois-Particle Physics and Cosmology (29.05.-03.06.2011)  
**Lindner, M.:**  
*Non-standard physics probed by neutrinos.*
- Bodrum, Turkey, 28<sup>th</sup> Turkish Physical Society International Physics Congress (06.09.-09.09.2011)  
**Cakirli, R.B.:**  
*Mini-Valence Wigner Effect and FT-ICR Mass Spectrometry Studies in Heidelberg.*
- Caen, France, 1<sup>st</sup> NanoIBCT Conference: Radiation damage of biomolecular systems: Nano-scale insights into Ion Beam Cancer Therapy (02.10.-06.10.2011)  
**Ullrich, J.:**  
*Research with advanced laser systems at MPIK: Few cycle pulses, attoseconds and FELs.*
- Cambridge, Massachusetts, U.S.A., PANIC11 - Rutherford Centennial (24.07.-29.07.2011)  
**Knöpfle K. T.:**  
*Status and Perspective of the GERDA Neutrinoless Double Beta Decay Experiment.*
- Cape Town, South Africa, 23<sup>rd</sup> International Workshop on Weak Interactions and Neutrinos WIN 2011 (31.01.-05.02.2011)  
**Buck, C.:**  
*The Double Chooz experiment.*  
**Holthausen, M.:**  
*Conformal Symmetry in the Minimal Left-Right Symmetric Model.*  
**Lindner, M.:**  
*Neutrinos and dark Matter.*
- CERN, Geneva, Switzerland, 13<sup>th</sup> International Workshop on Neutrino Factories, Superbeams and Beta Beams (NuFact11) (01.08.-06.08.2011)  
**Zhang, He:**  
*Flavor models with sterile neutrinos.*
- CERN, Geneva, Switzerland, V International Workshop on the Interconnection between Particle Physics and Cosmology (PPC 2011) (14.06.-18.06.2011)  
**Schwetz-Mangold, T.:**  
*Dark Matter direct detection: theoretical aspects.*
- Chiang Mai, Thailand, Asia-Pacific Regional IAU Meeting (25.07.-29.07.2011)  
**Kirk, J.G.:**  
*The pulsar wind termination shock.*
- Cracow, Poland, workshop on „Understanding Relativistic Jets“ (23.05.-26.05.2011)  
**Kirk, J.G.:**  
*Particle Acceleration: Relativistic Shocks.*
- Dallas, TX, USA, March Meeting of the American Physical Society (APS) 2011 (21.03.-25.03.2011)  
**Pfeifer, T.:**  
*Beyond the Frontiers of Time-Resolved Spectroscopy: Fully and Partially Coherent Light Fields.*
- Darmstadt, Germany, 4<sup>th</sup> EMMI workshop on Plasma Physics with Intense Heavy Ion and Laser Beams (02.05.-04.05.2011)  
**Keitel, C. H.:**  
*High-energy quantum dynamics with extremely strong laser pulses.*
- Darmstadt, Germany, EMMI Physics Days 2011, GSI (08.11.2011)  
**Blaum, K.:**  
*Precision Penning Trap Experiments with Exotic Ions.*
- Darmstadt, Germany, GSI, EMMI Workshop on Non-Linear Dynamics (31.10.-02.11.2011)  
**Moshhammer, R.:**  
*Non-Linear Light – atom/molecule interactions: Experiments at the FEL in Hamburg.*
- Delhi, India, 3<sup>rd</sup> International Conference on Current Developments in Atomic, Molecular, Optical and Nano Physics with Applications (CDAMOP) (14.12.-16.12.2011)  
**Harman, Z.:**  
*Relativistic electron correlation, QED and nuclear effects in highly charged ions.*  
**Kohler, M. C.:**  
*High-harmonic generation via continuum-continuum transitions or Rabi oscillations.*



- Ullrich, J.:**  
*Free electron lasers: New frontiers in atomic and molecular research ... and beyond.*
- Dornburg, Germany, Theorie-Symposium des Helmholtz-Instituts Jena (31.05.-01.06.2011)
- Di Piazza, A.:**  
*Testing strong-field QED and QED with intense laser pulses.*
- Müller, C.:**  
*High-energy atomic and QED processes in strong laser fields.*
- Pálffy, A.:**  
*Nuclear dynamics in coherent x-ray fields.*
- Dresden, Germany, DPG Frühjahrstagung Massenspektroskopie der Deutschen Physikalischen Gesellschaft (13.03.-18.03.2011)
- Buhr, H.:**  
*Hot Water in Space.*
- Eliseev, S.:**  
*Penning trap mass spectrometry for neutrino physics.*
- Wagner, A.:**  
*High-precision g-factor measurements on highly-charged ions.*
- Dresden, Germany, International Workshop on Atomic Physics (21.11.-25.11.2011)
- Müller, C.:**  
*Electron recombination in dense environments.*
- Dresden, Germany, Spring Meeting of the DPG (13.03.-18.03.2011)
- Müller, C.:**  
*Influence of two-center electronic correlations on atomic processes.* (main talk)
- Pfeifer, T.:**  
*Quantum Interference Control of Free and Bound Electrons in Atoms and Molecules.*
- Dresden-Rossendorf, Germany, Workshop on Petawatt Lasers at Hard X-Ray Light Sources (05.09.-09.09.2011)
- Di Piazza, A.:**  
*Classical and quantum electrodynamics effects in intense laser pulses.*
- Hatsagortsyan, K. Z.:**  
*Employment of Bragg scattering for enhancement of vacuum polarization effects and of pair production for an ultra-short gamma-ray characterization.*
- Pálffy, A.:**  
*Quantum control of nuclei with coherent x-ray light.*
- Ullrich, J.:**  
*The CAMP instrument: Multidimensional imaging experiments at free electron lasers.*
- Dublin, Ireland, DIAS-OCK Workshop „Multi-GeV Astrophysics with Ground-Based Detectors“ (12.12.–14.12.2011)
- Rieger, F.M.**  
*The potential of the GeV band for AGN physics.*
- Dublin, Ireland, ISWAMP Meeting (21.07.-23.07.2011)
- Moshhammer, R.:**  
*FEL induced Molecular Dynamics: Time-Resolved and in 3D.*
- Senftleben, A.:**  
*Characterising XUV FEL pulses with pump-probe autocorrelation.*
- East Lansing, Michigan, Workshop "Nuclei and Mesoscopic Systems" (08.03.2011)
- Weidenmüller, H.-A.:**  
*Chaos in Fermionic Many-Body Systems and the Metal-Insulator Transition.*
- Eisenach, Germany, International Symposium on Ultrafast Intense Laser Science (16.10.-21.10.2011)
- Di Piazza, A.:**  
*Tests of classical and quantum electrodynamics with strong laser fields.*
- Freiburg, Switzerland, Congress of the European Group on Atomic Systems (EGAS) (29.07.2011)
- Wagner, A.:**  
*The g-factor of hydrogenlike silicon  $^{28}\text{Si}^{11+,13+}$ .*
- Fuji-Yoshida, Japan, Summer Institute 2011 "Phenomenology of Elementary Particles and Cosmology" (12.08.-18.08.2011)
- Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

Gatlinburg, Tennessee, USA, 3<sup>rd</sup> International Workshop on Baryon and Lepton Number Violation (BLV 2011) (22.09.-24.09.2011)

**Akhmedov, E:**

*Neutrino oscillations in quantum mechanics and quantum field theory.*

**Dürr, M.:**

*Neutrinoless Double Beta Decay and Neutrino Masses.*

**Lindner, M.:**

*Invited summary talk.*

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay: Neutrino and Particle Physics.*

**Schwetz-Mangold, T.:**

*Global B-L, Neutrino Mass and Dark Matter.*

**Schwingerheuer, B.:**

*European efforts in neutrinoless double beta decay.*

Gatlinburgh, USA, 4<sup>th</sup> International Workshop on Electrostatic Storage Devices (08.06.-11.06.2011)

**Krantz, C.:**

*The Cryogenic Storage Ring CSR: Present Status and Outlook.*

**Lange, M.:**

*Experiments using Extremely Long Ion Storage Times in a Cryostatic Linear Trap.*

Geneva, Switzerland ISOLDE Workshop, CERN (05.12.2011)

**Kreim, S.:**

*ISOLTRAP Masses for Nuclear Structure and the r-Process.*

Geneva, Switzerland, CERN INTC-Meeting (02.02.2011)

**Blaum, K.:**

*A Storage Ring Facility at HIE-ISOLDE.*

Geneva, Switzerland, CERN, ADUC and ELENA meeting (28.10.-29.10.2011)

**Fischer, D.:**

*The ReMi-Experiment.*

Geneva, Switzerland, PHYSTAT 2011 Workshop on Statistical Issues Related to Discovery Claims in Search Experiments and Unfolding (17.06.-20.06.2011)

**Schmelling, M.:**

*Regularization by Control of the Resolution Function.*

Geneva, Switzerland, Workshop on Prospects of p-Pb collisions during the 2012 LHC HI run (17.10.2011)

**Schmelling, M.:**

*pA Collisions in LHCb.*

Gößweinstein, Germany, 2<sup>nd</sup> German-French-Russian Laser Symposium (14.04.-17.04.2011)

**Evers, J.:**

*Coherent control of cooperative x-ray light scattering.*

Guelph, Canada, 14<sup>th</sup> International Conference on Capture Gamma Ray Spectroscopy (30.08.2011)

**Weidenmüller, H.-A.:**

*Distribution of Neutron Resonance Widths.*

Hamburg, Germany, 2<sup>nd</sup> Workshop on Single Top Quark Production and Fourth Generations (05.09.-06.09.2011)

**Holthausen, M.:**

*Conformal Symmetry in the Minimal Left-Right Symmetric Model.*

Hamburg, Germany, European XFEL Users' Meeting (26.01.-28.01.2011)

**Ullrich, J.:**

*Users' experiences at LCLS.*

Hamburg, Germany, HASYLAB Users Meeting (27.01.2011)

**Moshhammer, R.:**

*XUV Pump-Probe Experiments with Atoms and Molecules at FLASH.*

- Hamburg, Germany, HESS AGN meeting, DESY (09.02.–11.02.2011)  
**Rieger, F.M.:**  
*VHE emission from the direct vicinity of supermassive black holes.*
- Hamburg, Germany, Workshop on Multiple Partonic Interactions at the LHC (21.11.–25.11.2011)  
**Volyanskyy, D.:**  
*Minimum Bias Physics with LHCb.*
- Heidelberg, Germany, Annual Meeting 2011 of the Astronomische Gesellschaft, The Milky Way: Survey and survey instruments (19.09.–23.09.2011)  
**Hofmann, W.:**  
*The high-energy Milky Way.*
- Heidelberg, Germany, Germany-Japan Round Table (01.12.–03.12.2011)  
**Wolf, A.:**  
*Low-Temperature Chemistry in the Laboratory.*
- Heidelberg, Germany, Heidelberger Graduiertentage, Universität Heidelberg (01.–04.10.2011)  
**Blaum, K.:**  
*Physics of Ion Traps – High-precision experiments with stored and cooled exotic ions in Penning traps.*
- Heidelberg, Germany, International School on Astroparticle Physics “ISAPP11” (08.07.–15.07.2011)  
**Rodejohann, W.:**  
*The Standard Model of Particle Physics.*
- Heidelberg, Germany, Society of Alexander-von-Humboldt Stiftung (AvH) Members Meeting (28.10.–29.10.2011)  
**Pfeifer, T.:**  
*Shortest Laser Flashes illuminate and steer the Quantum Motion of Electrons.*
- Karlsruhe, Germany, DPG-Frühjahrstagung 2011 (28.03.–01.04.2011)  
**Barry, J.:**  
*The role of neutrino mass observables in distinguishing neutrino mass models.*  
**Dürr, M.:**  
*Lepton Number Violating New Physics and Neutrinoless Double Beta Decay.*  
**Lindner, M.:**  
*Neutrinomassen und Physik jenseits des Standardmodells.*  
**Schmidt, D.:**  
*Neutrinos and Dark Matter Within an Extended Zee-Babu Model.*  
**Wagner, S.:**  
*Großproduktion der Target- und Gamma Catcher Szintillatoren für Double Chooz.*
- Karlsruhe, Germany, KATRIN Collaboration Meeting (10.03.2011)  
**Blaum, K.:**  
*Resonance enhancement of neutrinoless double EC.*  
*FT-ICR: Status and perspectives.*
- Kiel, Germany, Spring meeting of the German Physical Society (DPG) (28.03.–31.03.2011)  
**Keitel, C. H.:**  
*QED, radiative reaction and particle physics with strong laser-charged particle interaction.* (main talk)
- Krakow, Poland, Workshop “Understanding Relativistic Jets” (22.05.–27.05.2011)  
**Kirk, J.G.:**  
*Particle Acceleration: Relativistic Shocks.*
- Kyoto, Japan, International Workshop DyNano-2011: Structure and Dynamics of Nano-objects using short wavelength radiation (03.10.–07.10.2011)  
**Ullrich, J.;**  
*Free electron lasers: FS-Dynamics of A resolution.*
- Kyoto, Japan, JSPS-DFG Bilateral Seminar on “Use of X-ray Free Electron Lasers for Nano- and Life-Sciences” (07.10.–11.10.2011)  
**Ullrich, J.:**  
*Ultra-fast dynamics: Pump-probe experiments at FELs.*



- Las Vegas, USA, International Workshop on Photoionization (IWP) (23.05.-27.05.2011)  
**Crespo-López-Urrutia, J.R.:**  
*Photoionization of trapped iron and argon highly charged ions.*
- Lisbon, Portugal, 3<sup>rd</sup> international conference on Ultra-intense Laser Interaction Science (ULIS2011) (10.10.-13.10.2011)  
**Salamin, Y. I.:**  
*Direct acceleration of ions by a chirped laser pulse for medical and industrial applications.*
- Lisbon, Portugal, From the Planck Scale to the Electroweak Scale (Planck 2011) (30.05.-03.06.2011)  
**Holthausen, M.:**  
*Conformal Symmetry in the Minimal Left-Right Symmetric Model.*
- Liverpool, UK, FLAIR-Workshop (22.02.2011)  
**Blaum, K.:**  
*A New Route Towards Fundamental Tests with Anti-Hydrogen.*
- Los Alamos, New Mexico, U.S.A. 1TGe design workshop (teleconference) (18.04.-19.04.2011)  
**Knöpfle K. T.:**  
*Experiences from the construction of GERDA.*
- Madrid, Spain, FEMTO10 Conference (10.07.-15.07.2011)  
**Moshhammer, R.:**  
*FEL induced Molecular Dynamics: Time-Resolved and in 3D.*
- Mainz, Germany, DPG-Frühjahrstagung (19.03.-23.03.2011)  
**Lubashevskiy, A.:**  
*Investigations of the <sup>42</sup>Ar background in the LArGe test facility for the GERDA experiment.*
- Mainz, Germany, QED meeting of the Institute for Physics, Universität Mainz (03.07.2012)  
**Sturm, S.:**  
*The g-factor of the bound electron as test of quantum electrodynamics (QED).*
- Manchester, UK, Rutherford Centennial Conference 2011 (08.08.-12.08.2011)  
**Blaum, K.:**  
*Precision Measurement of Ground-state Properties with Stored Ions for Nuclear Structure Studies.*
- Menlo Park, CA, USA, SSRL/LCLS Users Meeting, Science Highlights (23.10.-27.10.2011)  
**Crespo-López-Urrutia, J.R.:**  
*X-ray resonance laser spectroscopy with highly charged ions.*
- Menlo Park, USA, XXXIX SLAC Summer Institute (25.07.-05.08.2011)  
**Hofmann, W.:**  
*Observations of Cosmic Rays.*
- Moscow, Russia, 15<sup>th</sup> Lomonosov Conference on Elementary Particle Physics (19.08.-24.08.2011)  
**Akhmedov, E.:**  
*Neutrino oscillations in quantum mechanics and quantum field theory.*  
**Gast, H.:**  
*Recent results of the High Energy Stereoscopic System (H.E.S.S.).*  
**Lindner, M.:**  
*Opportunities, challenges and potential surprises in neutrino physics.*
- Moscow, Russia, 8<sup>th</sup> International Topical SPARC Workshop (05.09.-10.09.2011)  
**Blaum, K.:**  
*g-factor of hydrogenlike silicon <sup>28</sup>Si<sup>13+</sup> - The most stringent test of bound-state quantum electrodynamics.*
- Moscow, Russia, SPARC Lecture Days (06.09.2011)  
**Blaum, K.:**  
*Precision Penning trap experiment with stored and cooled exotic ions.*
- Mumbai, India, TIFR, XXV International Symposium on Lepton Photon Interactions at High Energies (Lepton-Photon 2011) (22.08.-27.08.2011)  
**Schwetz-Mangold, T.:**  
*Neutrino Mass & Mixing – Status.*
- München, Germany, 12<sup>th</sup> International Conference on Topics in Astroparticle and Underground Physics (TAUP 2011) (05.09.-09.09.2011)

**Aharonian, F.A.:**

*Gamma Rays: Physics Interpretation.*

**Akhmedov, E:**

*Neutrino oscillations, energy-momentum conservation and entanglement.*

**Lindner, M.:**

*Neutrino oscillations with reactor neutrinos.*

**Schwingerheuer, B.:**

*Searches for neutrinoless double beta decay.*

Münster, Germany, DPG-Frühjahrstagung 2011 (21.03.-25.03.2011)

**Dürr, M.:**

*Lepton Number Violating New Physics and Neutrinoless Double Beta Decay.*

**Lubashevskiy, A.:**

*Commissioning of GERDA.*

Namur, Belgium, Annual Meeting of the Belgian Physical Society (25.05.2011)

**Ullrich, J.:**

*Free electron lasers: New frontiers in atomic and molecular research ... and beyond.*

Obertrubach, Germany, Erlangen Schule für Astroteilchenphysik (05.10.-13.10.2011)

**Hofmann, W.:**

*Gammaastronomie.*

Paris, France, 15<sup>th</sup> Paris Cosmology Colloquium 2011 (20.07.-22.07.2011)

**Lindner, M.:**

*keV sterile Neutrinos as Dark Matter.*

Paris, France, Workshop Frontiers in Neutrino Physics (4.10-6.10.2011)

**Akhmedov, E:**

*Sterile neutrinos and oscillation coherence for neutrinos produced in decays.*

**Lindner, M.:**

*keV sterile Neutrinos as Dark Matter.*

Pescara, Italy, IRAP PhD and Erasmus Mundus Workshop (21.03.-26.03.2011)

**Rieger, F.M.:**

*Particle acceleration and gamma-ray production in the vicinity of supermassive black holes.*

Pohang, Korea, The 7<sup>th</sup> Future Light Source Workshop 2011: Science and Technology (FLSWS11) (12.10.-13.10.2011)

**Ullrich, J.:**

*Free electron lasers: Dynamics and structure towards femtosecond time and nanometer spatial resolution.*

Prague, Czech Republic, 2<sup>nd</sup> ELI Beamlines Scientific Challenges Meeting (05.10.-06.10.2011)

**Keitel, C. H.:**

*Extremely High-intensity Laser-interactions with Fundamental Quantum Systems.*

Prague, Czech Republic, COST Meeting on Ion Chemistry in Space (17.05.-19.05.2011)

**Wolf, A.:**

*Low Energy Collisions of Molecular Cations: Exothermicity and Internal Excitation.*

Prague, Czech Republic, SPIE Optics + Optoelectronics Conference (18.04.-21.04.2011)

**Di Piazza, A.:**

*Classical and quantum radiation reaction effects in intense laser fields.*

**Hatsagortsyan, K. Z.:**

*Ultra-strong laser pulses: quantum radiative reaction and streak-camera for gamma-rays via pair production.*

**Keitel, C. H.:**

*High-energy quantum dynamics in ultra-strong laser pulses.*

*Laser-induced relativistic quantum dynamics and quantum electrodynamics.*

**Moshhammer, R.:**

*XUV pump-probe experiments at Free Electron Lasers.*

**Pálffy, A.:**

*Nuclear dynamics in intense laser fields.*

Prague, Czech Republic, Third International Workshop on Compound-Nucleus Reactions (22.09.2011)

**Weidenmüller, H.-A.:**

*Compound-Nucleus Reactions induced by Femtosecond Multi-MeV Laser Pulses.*

- Rehovot, Israel, Minerva-Workshop (22.05.-24.05.2011):  
**Krantz, C.:**  
*The Cryogenic Storage Ring CSR: Present Status and Outlook.*  
**Lange, M.:**  
*Experiments with the Cold EIBT.*  
**Froese, M.:**  
*Bunching Experiments in a Cryogenic EIBT.*
- Riezlern, Austria, Workshop of Accelerator and Plasma Physics (06.03.-12.03.2011)  
**von Hahn, R.:**  
*Status of the CSR.*
- Ringberg Castle, Germany, Second Ringberg Meeting on Science with FELs (27.02.-02.03.2011)  
**Moshhammer, R.:**  
*FEL induced molecular dynamics.*
- Rio de Janeiro, Brazil LISHEP 2011: Workshop on the LHC "Present and Future" (05.07.-10.07.2011)  
**Volyanskyy, D.:**  
*Soft and diffractive physics at LHCb.*
- Rome, Italy, 3<sup>rd</sup> Roma International Conference on Astroparticle Physics (25.05.-27.05.2011)  
**Aharonian, F.A.:**  
*High Energy Gamma Ray Astronomy.*
- Rostock, Germany, International Conference on Correlation Effects in Radiation Fields (CERF11) (12.09.-16.09.2011)  
**Ullrich, J.:**  
*Ultrafast dynamics: Pump-probe experiments at FELs.*
- Salt Lake City, USA, Gaseous Electronics Conference (GEC), Salt Lake City, USA (14.11.-18.11.2011)  
**Dorn, A.:**  
*(e,2e) on small noble gas clusters and aligned H<sub>2</sub>.*
- Sapporo, Japan, 12<sup>th</sup> International Conference on Multiphoton Processes (ICOMP12) (03.07.-06.07.2011)  
**Kohler, M. C.:**  
*Electron correlation and interference effects in strong-field processes.*  
**Ullrich, J.:**  
*Ultrafast dynamics: Pump-probe experiments at free electron lasers.*
- Sarajevo, Bosnia and Herzegovina, 20<sup>th</sup> annual International Laser Physics Workshop (LPHYS'11) (11.07.-15.07.2011)  
**Evers, J.:**  
*Coherent control of cooperative x-ray scattering.*  
**Harman, Z.:**  
*Laser generation of high-quality ion beams for cancer radiotherapy.*  
**Hatsagortsyan, K. Z.:**  
*Role of Multiple Rescattering of Electrons at Above-threshold Ionization in Mid-infrared Strong Laser Fields.*  
**Keitel, C. H.:**  
*Quantum vacuum, electrons and ions in extremely strong laser pulses.*  
**Pálffy, A.:**  
*Laser-assisted tunneling of quasistationary states.*  
**Pfeifer, T.:**  
*Attosecond Continuum- and Bound-State Wavepacket Interference: Applications in Strong-Field HHG and Electron Localization.*
- Seattle, USA, Spring Meeting at the American Astronomical Society Meeting (09.01.-13.01.2011)  
**Aharonian, F.A.:**  
*Exploring the Very High Energy Sky with H.E.S.S.*  
**Hofmann, W.:**  
*The Very High Energy Gamma Ray Sky Viewed with H.E.S.S.*  
**Völk, Heinrich J.:**  
*H.E.S.S. and Cosmic Rays.*
- Seoul National University, Korea, KIAS Workshop on Theoretical Issues in Neutrino Physics (13.11.-16.11.2011)  
**Rodejohann, W.:**  
*Gauged L( $\mu$ ) – L( $\tau$ ).*



**Zhang, H.:**

*Light sterile neutrinos in favor models.*

Seoul, Korea, 6<sup>th</sup> International Workshop on Low Energy Neutrino Physics (09.11.-12.11.2011)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Neutrino Physics.*

Snowbird, Utah, USA, 41<sup>th</sup> Winter Colloquium on the Physics of Quantum Electronics (02.01.-06.01.2011)

**Evers, J.:**

*X-ray and gamma-ray quantum optics.* (plenary talk)

**Pálffy, A.:**

*Excitons, entanglement and coherent control with nuclei.* (plenary talk)

St. Petersburg, Russia, Isomers in Nuclear and Interdisciplinary Research Workshop (07.07.-10.07.2011)

**Pálffy, A.:**

*Population and depletion of isomeric states by strong electromagnetic fields.*

Stockholm, Sweden, 7<sup>th</sup> TeV particle conference 2011, Alba Nova University Center (01.08.-05.08.2011)

**Marandon, V.:**

*Pulsar Wind Nebulae : recent advances in the TeV range.*

Stockholm, Sweden, Nordic Conference on Nuclear Physics 2011 (13.07.-17.07.2011)

**Nagy, Sz.:**

*TRIGA-SPEC: high-precision experiments at a nuclear research reactor.*

Stockholm, Sweden, NORDITA, Kick-off meeting "Studying Quantum Mechanics in the Time Domain" (22.08.-16.09.2011)

**Ullrich, J.:**

*FEL studies of few-particle quantum dynamics.*

Sylt, Germany, 1<sup>st</sup> CFEL-Symposium (18.03.-20.03.2011)

**Ullrich, J.:**

*CFEL: Past, presence and future.*

Tokyo, Japan, International Workshop on Physics of Rare-RI Ring, RIKEN (10.11.2011)

**Baum, K.:**

*High-Precision Mass Measurements in Penning Traps and Storage Rings.*

Toulouse, France, AGN in the CTA Era. (16.05.-17.05.2011)

**Kirk, J.G.:**

*Extreme Acceleration Processes.*

Toulouse, France, FASTQUAST-YEP Meeting (18.07.-22.07.2011)

**Pfeifer, T.:**

*Spectral coherence properties of pulsed traditional and free-electron lasers and their applications in femto-/attosecond time-resolved spectroscopy.*

Trento, Italy, ECT\* Workshop: The Origin of the Elements(17.05.2011)

**Blaum, K.:**

*High-Precision Measurements of Nuclear Masses for Astrophysics.*

Trento, Italy, ECT, Neutrinos in Nuclear, Particle and Astrophysics (09.05.-13.05.2011)

**Lindner, M.:**

*Neutrinos and Dark Matter as Probes of New Physics.*

Trento, Italy, ECT\* workshop:Nuclear structure seen through ground-state properties of exotic nuclei (17.10.-21.10.2011)

**Cakirli, R.B.:**

*Correlations of differential ground state and spectroscopic observables.*

**Eronen, T.:**

*Nuclear structure studied via masses at JYFLTRAP.*

**Kreim, S.:**

*Recent Mass Measurements for Nuclear-Structure Studies with ISOLTRAP.*

**Yordanov, D.:**

*Ground States and Isomers of Cadmium by High-Resolution Laser Spectroscopy.*

- Trieste, Italy, Workshop on New Frontiers in Atomic, Molecular and Cluster Physics and Chemistry (14.11.-15.11.2011)  
**Ullrich, J.:**  
*Ultrafast dynamics: Pump-probe experiments at free electron lasers.*
- Ustron, Poland, XXXV International Conference of Theoretical Physics "Matter to the Deepest" (12.09.-18.09.2011)  
**Rodejohann, W.:**  
*Neutrinoless Double Beta Decay and Neutrino Physics.*
- Valencia, Spain, 1<sup>st</sup> Workshop on Flavor Symmetries and consequences in Accelerators and Cosmology "FLASY 2011" (11.07.-14.07.2011)  
**Rodejohann, W.:**  
*Predicting Deviations and Alternatives to tri-bimaximal Mixing.*
- Varenna, Lake Como, Italy, Passion for Light (16.09.2011)  
**Hofmann, W.:**  
*Cherenkov light: key to multi-messenger astronomy.*
- Veldhoven, Netherlands, Annual Meeting of the Dutch Foundation for Fundamental Research (FOM) (18.01.-19.01.2011)  
**Moshhammer, R.:**  
*AMO Physics with XUV Free-Electron Lasers.*
- Venice, Italy, XIV International Workshop on Neutrino Telescopes (15.03.-18.03.2011)  
**Aharonian, F.A.:**  
*Predicting Galactic Neutrino Fluxes from Gamma Ray Data.*
- Vulcano, Italy, Frascati Workshop „Multifrequency Behaviour of High Energy Cosmic Sources“ (23.05.-28.05.2011)  
**Rieger, F.M.:**  
*Cen A as VHE and UHE cosmic ray source.*
- Wako, Japan, The 11<sup>th</sup> International Symposium on Origin of Matter and Evolution of Galaxies (OMEG11), (14.11.2011)  
**Blaum, K.:**  
*High-precision mass measurements for nuclear astrophysics.*
- Warsaw, Poland, SCALARS (26.08.-29.08.2011)  
**Lindner, M.:**  
*Unification and supersymmetric extensions of the Standard Model.*
- Wartburg, Eisenach, Germany, International Symposium on Ultrafast Intense Laser Science (ISUILS10) (16.10.-21.10.2011)  
**Ullrich, J.:**  
*Ultrafast dynamics: Pump-probe experiments at free electron lasers.*
- Whistler, Canada, 11<sup>th</sup> International Workshop on the Interrelationship between Plasma Experiments in the Laboratory and in Space (IPELS) (10.07.-15.07.2011)  
**Kirk, J.G.**  
*Relativistic shocks and particle acceleration.*
- Wien, Austria, 4<sup>th</sup> International Conference on Exotic Atoms and Related Topics (EXA2011) (05.09.-09.09.2011)  
**Kellerbauer, A.:**  
*The AEGIS experiment at CERN: Measuring the free fall of antihydrogen.*

## At Other Institutes

### Aharonian, F.A.:

*VHE gamma-rays.*

Nagoya, Japan, Nagoya University, Physics Colloquium (18.02.2011)

*Exploring the Extreme Universe.*

Versoix, Switzerland, Inauguration of the Center for Astroparticle Physics CAP Genève (09.03.2011)

### Akhmedov, E:

*Neutrino oscillations in quantum mechanics and quantum field theory.*

Heidelberg, Germany, Seminar of ITP Heidelberg University (12.05.2011)

### Barkov, M.V.:

*Gamma-ray flares from AGN jet – Red Giant interactions.*

Sagamihara, Japan, The Institute of Space and Astronautical Science of the Japan Aerospace Exploration Agency (05.09.2011)

### Blaum, K.:

*Geladene in Haft - Präzisionsexperimente mit gespeicherten Ionen.*

Universität Mannheim (13.01.2011) and

Universität Köln (21.06.2011)

*Precision Penning Trap Experiments with Stored and Cooled Exotic Ions.*

MPI Gravitationsphysik, München (03.05.2011) and

CERN, Genf (08.06.2011)

*Precision Measurements of Ground-state Properties for Nuclear Structure Studies.*

Universität Bordeaux (06.05.2011)

*Precision experiments with cooled and stored ions.*

Universität Stockholm (09.05.2011)

*Experiments with stored highly-charged ions at ISOLDE: TSR@HIE-ISOLDE,*

GSI, Darmstadt (13.07.2011)

*High-precision mass measurements on cooled and stored exotic ions.*

*g-Factor measurements of highly charged ions and the proton/antiproton for fundamental studies.*

*High-resolution laser spectroscopy on short-lived nuclides for nuclear structure studies.*

Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou, China (31.08.-02.09.2011)

*g-Factor of hydrogenlike silicon  $^{28}\text{Si}^{13+}$  - The most stringent test of bound-state quantum electrodynamics.*

Universität Giessen (24. 11.2011)

### Cakirli, R.B.:

*Nuclear Structure Studies from Simple Observables.*

*Mass Measurements using the FT-ICR detection Method and the FT-ICR setup in Heidelberg.*

Greifswald University, Germany (16.05.2011)

### Casanova, S.:

*Molecular clouds as cosmic ray barometers.*

CNRS APC, Paris, France (16.02.2011)

*Gamma ray emission from molecular clouds.*

University of Nijmegen, The Netherlands (22.03.2011) and

University of Toulouse, France (21.04.2011) and

North West University, Potchefstroom, South Africa (15.07.2011)

### Cavaletto, S. M.:

*Time-Dependent Phenomena and Resonance Fluorescence.*

Argonne, Illinois, USA, Argonne National Laboratory, Ultrafast Special Interest Group Meeting (25.08.2011)

### Crespo López-Urrutia, J.R.:

*Laser spectroscopy of highly charged ions (from the x-ray region to the visible spectrum).*

Heidelberg, Germany, IOTA COST-Seminar (23.03.2011)

*X-ray observation of black hole and massive binary systems.*

Heidelberg, Germany, MPI für Astronomie (26.06.2011)

*X-ray resonance laser spectroscopy with highly charged ions.*

Aarhus, Denmark, Aarhus University (21.09.-23.09.2011)

*X-ray laser spectroscopy of plasmas: reproducing the surroundings of black-holes in the laboratory.*



Wien, Austria, TU Wien, Institut für Allgemeine Physik (08.11.2011) and  
Göteborg, Sweden, EGAS Board Meeting, Göteborg University (11.11.2011)

**Di Piazza, A.:**

*Testing strong-field classical and quantum electrodynamics with intense laser fields.*

Darmstadt, Germany, Technische Universität Darmstadt (27.06.2011) and  
Berkeley, California, USA, Lawrence Berkeley National Laboratory (16.06.2011)

*Strong-field CED and QED with intense laser fields.*

Los Alamos, New Mexico, USA, Los Alamos National Laboratory (09.03.2011) and  
Moscow, Russia, Prokhorov General Physics Institute (21.02.2011)

*High-order QED processes in intense laser fields.*

Moscow, Russia, P. N. Lebedev Physical Institute (24.02.2011)

**Dorn, A.:**

*Novel Studies of Electron-Impact Induced Ionization of Atoms and Molecules.*

New York, USA, Columbia University, seminar (22.11.2011)

**Eliseev, S.:**

*Phase-Imaging Ion-Cyclotron-Resonance Technique.*

GSI, Darmstadt, Germany (17.12.2013)

**Evers, J.:**

*Quantum optics with novel coherent light sources.*

Saarbrücken, Germany, Universität des Saarlandes, Fachbereich Physik (26.10.2011)

*Quantenoptik mit intensiven und hochfrequenten kohärenten Lichtquellen.*

Düsseldorf, Germany, Heinrich-Heine-Universität Düsseldorf, Fachbereich Physik (01.04.2011)

**Galow, B. J.:**

*Laser-generated Ion Beams for Medical Applications.*

Heidelberg, Germany, Physikalisches Institut, joint University-MPI seminar on atomic physics in strong electromagnetic fields (10.11.2011)

**Hofmann, W.:**

*Kosmische Beschleuniger.*

Heidelberg, Germany, Physikalisches Institut, gemeinsames Kolloquium KIT und Universität Heidelberg (04.02.2011)

*Wo kommt die Teilchenstrahlung aus dem Weltall her?*

Heidelberg, Germany, Paulskirche, 625 Jahre Ruperto Carola (23.05.2011)

*Astronomy with Cherenkov Telescopes: Probing Cosmic Particle Accelerators.*

Zürich, Switzerland, ETH Zürich, Kolloquium (05.10.2011) and

Lausanne, Switzerland, Kolloquium (07.11.2011) and

Basel, Switzerland, Kolloquium (18.11.2011)

**Keitel, C. H.:**

*Extremely high-intensity laser interactions with fundamental quantum systems.*

London, United Kingdom, Imperial College, QOLS seminar (09.12.2011)

**Kellerbauer, A.:**

*Ultracold Negative Ions by Laser Cooling.*

University of Fribourg, Switzerland, (14.04.2011)

**Kreim, S.:**

*Meeting the challenges for more exotic nuclei at the mass spectrometer ISOLTRAP.*

Experimental Nuclear Physics Seminar, Ludwig Maximilians-Universität, München, Germany (04.02.2011)

**Lindner, M.:**

*Perspectives of Direct Dark Matter Searches.*

Bonn, Germany, Kolloquium der Helmholtz Allianz, Universität Bonn (09.12.2011)

*Neutrinos as Probes of new Physics.*

Bonn, Germany, Bethe-Kolloquium, Universität Bonn (08.12.2011)

*Dunkle Materie.*

Heidelberg, Germany, ROTARY-Club, Kirchhoff Institut für Physik (16.11.2011)

**Liu, C.:**

*Strong field photo-ionization revisited with mid-infrared laser pulses.*

Daejeon, Korea, Department of Physics and Coherent X-ray Research Center (CXRC), Korea Advanced University of

Science and Technology (28.11.2011) and  
Dresden, Germany, Max-Planck-Institut für Physik komplexer Systeme (MPIKS) (15.08.2011) and  
Shanghai, China, College of Science, East China University of Science and Technology (27.05.2011)

**Moshhammer, R.:**

*Time-resolved experiments with atoms and molecules using XUV and IR laser pulses.*  
Dresden, Germany, Kolloquium, MPI für Physik komplexer Systeme (MPIPKS) (21.11.2011)

**Müller, C.:**

*Influence of two-center electron-electron correlations on atomic and QED processes.*  
Rostock, Germany, University of Rostock, Seminar des Instituts für Physik (17.05.2011)  
*Relativistische Prozesse in starken Laserfeldern und interatomare Quantenkorrelationen.*  
Düsseldorf, Germany, Heinrich-Heine-Universität, Fachbereich Physik, Vorstellungsvortrag (21.03.2011)

**Nagy, Sz.:**

*Measurements with an Advanced Trapping System.*  
NUSTAR Seminar, GSI Darmstadt, Germany (18.05.2011)  
*TRIGA-SPEC: Towards precision experiments on neutron-rich fission products at the TRIGA research reactor in Mainz.*  
AP-EMMI-Seminar, GSI Darmstadt, Germany (29.06.2011)

**Pálffy, A.:**

*Laser-assisted tunneling of quasistationary states.*  
Moscow, Russia, General Physics Institute of the Russian Academy of Sciences, Multiphoton Seminar (29.06.2011)  
*Nuclear excitons and control of gamma-ray emission.*  
Geneva, Switzerland, CERN, ISOLDE Seminar (23.03.2011) and  
Jyväskylä, Finland, Physics Institute, University of Jyväskylä, Nuclear Seminar (24.02.2011)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*  
Heidelberg, Germany, Universität Heidelberg (08.12.2011)  
*Predicting Neutrino Mass and Mixing.*  
Dresden, Germany, TU Dresden (18.01.2011)

**Schmelling, M.:**

*Prospects for pA physics with LHCb.*  
Santiago de Compostela, Spain, University of Santiago de Compostela (12.12.2011)  
*The Science and Technology of the LHCb Experiments at the CERN Large Hadron Collider.*  
Reykjavik, Iceland, University of Iceland (15.09.2011)

**Schmidt, D.:**

*Dark Matter and Neutrino Masses from Global U(1)BL Symmetry Breaking.*  
Valencia, Spain, IFIC, AHEP Seminar (12.01.2012)

**Schwetz-Mangold, T.:**

*News from neutrino oscillations: hints for  $\theta_{13}$  and sterile neutrinos.*  
Basel, Switzerland, Univ. Basel (03.11.2011) and  
Oxford, UK, Univ. Oxford (27.10.2011) and  
London, UK, King's College London (26.10.2011)  
*Results for Dark Matter direct detection and their interpretation*  
Grenoble, France, LPSC Grenoble (08.09.2011)  
*Results from Dark Matter direct detection searches and their interpretation.*  
Aachen, Germany, RWTH Aachen (12.04.2011)

**Sturm, S.:**

*The g-factor of hydrogen-like silicon: The most stringent test of BS-QED in strong fields.*  
Quantum seminar of the Institute for Physics, Universität Mainz, Germany (09.06.2011)

**Ullrich, J.:**

*Free Electron Lasers: Dynamics and structure towards femtosecond time and nanometer spatial resolution.*  
Freiburg, Germany, Quantum Efficiency Seminar and Colloquium, Universität Freiburg (24.05.2011)

**Wagner, A.:**

*High-precision measurement of the g-factor of the electron bound in hydrogen-like  $^{28}\text{Si}^{13+}$ .*  
Atomic physics seminar, GSI Darmstadt, Germany (27.04.2011)

*High-precision measurement of the g-factor of the electron bound in hydrogen- and lithiumlike silicon  $^{28}\text{Si}^{11+,13+}$ .*  
Graduiertenkolleg and EMG-Seminar, Johannes Gutenberg-Universität, Mainz, Germany (30.11.2011)

**Wolf, A.:**

*Cold Chemistry with Fast Ion Beams.*

Institutskolloquium, Universität Gießen, Germany (12.05.2011)

*Cryogenic Ion Storage – Project Goals and Status of the Heidelberg CSR.*

Seminar Atomphysik, GSI Darmstadt, Germany (30.11.2011)

**Zhang, He:**

*Neutrino masses and lepton flavor violations.*

München, Germany, Max-Planck-Institut für Physik (19.05.2011)



# Invited Talks 2012

## At Conferences and Symposia

Amsterdam, The Netherlands, SPIE 2012, Astronomical Telescopes and Instrumentation (01.07.-06.07.2012)

**Hofmann, W.:**

*Very high energy gamma-ray astronomy with the H.E.S.S. telescopes.  
The Cherenkov Telescope Array.*

Assergi, LNGS, Italy, Neutrino at the Turning Point (vTURN2012) (08.05.-10.05.2012)

**Schwetz-Mangold, T.:**

*Learning from current facilities: mass ordering and CP violation.*

Austin, TX, USA, Annual Gaseous Electronics Conference (GEC 2012) (22.10.-26.10.2012)

**Fischer, D.:**

*Ion-impact induced ionization of laser-cooled lithium.*

Bad Honnef, Germany, 497. Wilhelm and Else Heraeus Seminar: Strong Interactions beyond the Standard Models (13.02.-15.02.2012)

**Holthausen, M.:**

*Natural Vacuum Alignment from Group Theory.*

Bad Honnef, Germany, WE-Heraeus Seminar "Progress in Nuclear Resonance Scattering: from Methods to Materials" (26.02.-29.02.2012)

**Evers, J.:**

*Exploring the nonlinear and quantum world with nuclear resonance scattering.*

Bad Honnef, Germany, WE-Heraeus-Seminar: First Results from LHC (10.12.-16.12.2012)

**Lindner, M.:**

*Implications from neutrino physics and electroweak precision physics.*

Bad Honnef, Germany, XXIV Workshop Beyond the Standard Model (12.03.-13.03.2012)

**Schwetz-Mangold, T.:**

*Results from dark matter direct detection and their implications.*

Bad Kreuznach, Germany, Klausurtagung des Graduiertenkollegs "Symmetry Breaking in Fundamental Interactions" der Universität Mainz (24.09.-25.09.2012)

**Blaum, K.:**

*Precision tests of Fundamental Interactions with Cooled and Stored Ions: Part I - Mass Measurements.*

*Precision tests of Fundamental Interactions with Cooled and Stored Ions: Part II - g-Factor Measurements.*

Bad Saarow, Germany, Conference „100 years of cosmic rays“ (05.08.-08.08.2012)

**Aharonian, F.A.:**

*High Energy Gamma Sources.*

Banff National Park, Alberta, Canada, 2012 Ultrafast Dynamic Imaging of Matter Conference (01.07.-03.07.2012)

**Ullrich, J.:**

*Ultra-fast Dynamics Explored at Free-Electron Lasers.*

Barcelona, Spain, Workshop „Exploring the Non-thermal Universe with Gamma Rays“ (06.11.-09.11.2012)

**Barkov, M.V.**

*Star-Jet Interactions.*

**Inoue, .S.**

*Particle Acceleration and Gamma-Ray Emission from Blazars.*

**Rieger, F.M.:**

*Radio Galaxies at Highest Energies.*

**Völk, Heinrich**

*Galactic Cosmic Rays.*

Beijing, China, IAU XXIII General Assembly (20.08.-31.08.2012)

**Hofmann, W.:**

*Introducing the Cherenkov Telescope Array.*

- Beijing, China, International Conference on High Energy Density Physics (ICHEDP 2012) (18.10.-21.10.2012)  
**Keitel, C. H.:**  
*Extremely high-intensity laser interactions with fundamental quantum systems.*
- Beijing, Peking University, China, 20<sup>th</sup> International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2012) (13.08.-18.08. 2012)  
**Fileviez Perez, P.:**  
*On the Origin of R-parity Violation.*
- Berkeley, CA, USA, Conference on Frontiers of Plasma Astrophysics (26.01.-27.01.2012)  
**Kirk, J.G.:**  
*The first-order Fermi mechanism at pulsar-wind termination shocks.*
- Berkeley, California, USA, Workshop on Nonlinear QED Phenomena with Ultra-Intense PW-class Lasers (14.05.-16.05.2012)  
**Keitel, C. H.:**  
*Quantum vacuum, electrons and ions in extremely strong laser pulses.*
- Berlin, Germany, Conference on high-intensity lasers and high-field phenomena (HILAS) (19.03.-21.03.2012)  
**Moshhammer, R.:**  
*XUV induced molecular dynamics: Time-Resolved and in 3D.*
- Berlin, Germany, Int. Conference on Many Particle Spectroscopy of Atoms, Molecules, Clusters and Surfaces (MPS) (27.08.-01.09.2012)  
**Dorn, A.:**  
*(e,2e) on small noble gas clusters and H<sub>2</sub> (plenary talk).*  
**Fischer, D.:**  
*Fully differential and state-selective measurements of ion-impact induced ionization of laser-cooled lithium.*  
**Moshhammer, R.:**  
*Studying molecular dynamics with intense XUV FEL radiation.*  
**Pfeifer, T.:**  
*Two-electron dynamics in autoionizing helium atoms: Attosecond- and millielectronvolt-resolved measurement and control from the weak-perturbative quantum to the strong-field classical regime.*  
**Schuricke, M.:**  
*Two- and three-photon double ionization of lithium.*  
**Voitkiv, A.B.:**  
*Interference effects in collisions of highly charged ion with molecules.*
- Berlin, Germany, Licht 2012, 20. Gemeinschaftstagung der Lichttechnischen Gesellschaft e.V. (LiTG) (11.09.-14.09.2012)  
**Ullrich, J.:**  
*Licht ist Zukunft. Festvortrag zum 100-jährigen Jubiläum der LiTG.*
- Berlin, Germany, XVII International Symposium on Very High Energy Cosmic Ray Interactions (10.-15.08.2012)  
**Volyanskyy, D.:**  
*LHCb status and results in 2010-2012.*
- Bern, Switzerland, I.S.S.I. workshop on "Physics of Collisionless Shocks" (23.04.-27.04.2012)  
**Kirk, J.G.:**  
*Pulsar-wind termination shocks.*
- Bern, Switzerland, I.S.S.I. workshop on "Physics of Collisionless Shocks" (17.12.-21.12.2012)  
**Kirk, J.G.:**  
*Electromagnetically modified shocks.*
- Bern, Switzerland, I.S.S.I. workshop on Microphysics of Cosmic Plasmas (16.04.-20.04.2012)  
**Kirk, J.G.:**  
*Relativistic shocks.*
- Bielefeld, Germany, 7. Kosmologietag (03.05.2012)  
**Schwetz-Mangold, T.:**  
*News from neutrinos.*
- Blagoevgrad, Bulgaria, 8<sup>th</sup> Balkan School on Nuclear Physics (03.-12.07.2012)  
**Yordanov, D.:**  
*Ground States and Isomers of Cadmium by High-Resolution Laser Spectroscopy.*

- Blois, France, 24<sup>th</sup> Rencontres de Blois, Particle Physics and Cosmology (28.05.-01.06.2012)  
**Smolnikov, A.:**  
*Status of the GERDA experiment.*
- Bodrum, Turkey, Turkish Physical Society 29<sup>th</sup> International Physics Congress (TPS-29) (05.09.-08.09.2012)  
**Blaum, K.:**  
*Precision Penning Trap Experiments with Stored and Cooled Exotic Ions.*  
**Cakirli, R.B.:**  
*Correlations in structure: mass and spectroscopic data.*
- Bol'shie Koty, Lake Baikal, Russia, Baikal Summer School on Physics of Elementary Particles and Astrophysics (05.07.-12.07.2012)  
**Akhmedov, E:**  
*Neutrino oscillations in quantum mechanics and quantum field theory.*
- Bonn, Germany, Laboratory Astrophysics Meeting 2012 (21.11.-23.11.2012)  
**Kreckel, H.:**  
*On the Low-Temperature Nuclear Spin Equilibrium of Interstellar H<sub>3</sub><sup>+</sup>.*  
**Wolf, A.:**  
*Fast Stored Ion Beams as Tools for Laboratory Astrophysics.*
- Bonn, Germany, XX International Workshop on Deep-Inelastic Scattering and Related Subjects (DIS) (26.03.-30.03.2012)  
**Britsch, M.:**  
*Inclusive particle production at LHCb.*  
**Volyanskyy, D.:**  
*Measurement of the forward energy flow in pp collisions at 7 TeV with LHCb.*
- Bucarest, Romania, 2<sup>nd</sup> European Nuclear Physics Conference (EuNPC2012) (17.09.-21.09.2012)  
**Ascher, P.:**  
*Two-proton radioactivity studies with a Time Projection Chamber.*  
**Cakirli, R.B.:**  
*Correlations in structure between masses and spectroscopic observables.*
- Bucharest, Romania, International Conference on Optics "Micro- to Nano-Photonics III - ROMOPTO 2012" (03.09.-06.09.2012)  
**Macovei, M. A.:**  
*Multi-atom effects in laser fields. (main talk)*
- Buenos Aires, Argentina, Workshop „CTA and the Origin of Cosmic Rays“ (19.11.-21.11.2012)  
**Inoue, S.**  
*Gamma-Ray Burst: Multi-Messenger Prospects.*
- Cairns, Australia, NIC XII Conference (07.08.2012)  
**Blaum, K.:**  
*Nuclear masses for astrophysics.*
- Calgary, Canada, 21<sup>st</sup> International Laser Physics Workshop (LPHYS'12) (23.07.-27.07.2012)  
**Di Piazza, A.:**  
*On the stability of vacuum in a single plane wave at finite temperature.*  
*Quantum electrodynamical processes in intense laser and atomic fields.*  
**Evers, J.:**  
*Engineering advanced level schemes in nuclear quantum optics.*  
**Galow, B. J.:**  
*Laser particle acceleration schemes for ion beam tumor therapy.*  
**Harman, Z.:**  
*Quantum manipulation and acceleration of ions by strong laser fields.*  
**Hatsagortsyan, K. Z.:**  
*Detection schemes for QED nonlinearities with super-strong lasers.*  
**Müller, C.:**  
*(1) Spin effects in strong-field QED processes. (main talk)*  
*(2) Strong-field processes involving positrons, pions and protons. (main talk)*  
**Pálffy, A.:**  
*Nuclear coherent population transfer with x-ray laser pulses.*  
**Ullrich, J.:**

*Matter in ultra-intense X-ray pulses of free-electron lasers: Nano-plasmas and coherent imaging. Ultra-fast dynamics: From atoms to He droplets.*

Calgary, Kanada, LPHYS'12: Modern Trends in Laser Physics (21.07.-29.07.2012)

**Kirk, J.G.:**

*Gamma-ray and electron-positron pair production in intense laser-solid interaction.*

Calgary, Kanada, LPHYS'12: Strong-field quantum electrodynamics (21.07.-29.07.2012)

**Kirk, J.G.:**

*Electron-positron pair effects on the hole-boring scenario in intense laser-solid interactions.*

Cambridge, USA, Theory of Electron-Molecule Collisions for Astrophysics, Biophysics and Low-Temperature Plasmas: Opportunities and Challenges, ITAMP workshop (03.-05.12.2012)

**Kreckel, H.:**

*Dissociative Recombination Measurements at Ion Storage Rings: Achievements and Perspectives.*

Cluj, Romania, COST Action CUSPFEL, 4<sup>th</sup> annual meeting (20.03.-24.03.2012)

**Pfeifer, T.:**

*Integrating attosecond temporal and meV spectral resolution: Precision spectroscopy of laser-dressed correlated two-electron transition states.*

Cocoyoc, Mexico, Beauty in Physics: Theory and Experiment : in Honor of Francesco Iachello on the Occasion of his 70<sup>th</sup> Birthday (14.05.-18.05.2012)

**Cakirli, R.B.:**

*Relation of masses and spectroscopic observables to structure.*

Conca Specchiulla (Otranto, Lecce), Italy, NOW2012 - Neutrino Oscillation Workshop (09.09.-16.09.2012)

**Akhmedov, E.:**

*Sterile neutrinos and oscillation coherence for neutrinos produced in decays.*

**Dürr, M.:**

*Lepton Number Violating New Physics and Neutrinoless Double Beta Decay.*

**Heeck, J.:**

*Gauged Flavor Symmetries.*

**Knöpfle K. T.:**

*GERDA, Status and Perspectives.*

**Lindner, M.:**

*Sterile neutrinos and dark matter.*

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

Daresbury, UK, Cockcroft Institute, Symposium on Quantum Systems and Research(ers) at Accelerators (16.05.2012)

**Kellerbauer, A.:**

*The AEGIS Experiment: Measuring the Free Fall of Antihydrogen.*

Darmstadt, Germany, NuSTAR Meeting 2012, GSI (01.03.2012)

**Blaum, K.:**

*The TSR@ISOLDE project.*

Darmstadt, Germany, 3<sup>rd</sup> Aspera Technology Forum (13.03.-14.03.2012)

**Knöpfle, K. T.:**

*The GERDA LN2/LAr Cryostat and its Infrastructure.*

Darmstadt, Germany, 6<sup>th</sup> International Workshop on Shape-Phase Transitions and Critical-Point Phenomena in Nuclei (27.-29.02.2012)

**Cakirli, R.B.:**

*Relation of masses and spectroscopic observables to structure.*

Darmstadt, Germany, EMMI Physics Days, GSI (14.11.2012)

**Nagy, Sz.:**

*Recent results from TRIGA-TRAP.*

Darmstadt, Germany, EMMI Workshop "The <sup>229m</sup>Th Nuclear Isomer Clock" (25.09.-27.09.2012)

**Pálffy, A.:**

*<sup>229m</sup>Th at the Interface of Atomic and Nuclear Physics.*



- Darmstadt, Germany, GSI, EMMI Workshop Physics Prospects at FLAIR - The Facility for Low-Energy Antiproton and Ion Research (03.05.-04.05.2012)
- Blaum, K.:**  
*Physics Prospects at FLAIR.*
- Fischer, D.:**  
*Many-particle quantum dynamics with antiprotons.*
- Kellerbauer, A.:**  
*Prospects for Laser Cooling of Atomic Anions.*
- Darmstadt, Germany, Joint IZEST – Helmholtz Beamlines Workshop (23.04.-24.04.2012)
- Müller, C.:**  
*High-energy atomic, nuclear and QED processes in strong laser fields.* (main talk)
- Voitkiv, A.B.:**  
*Some Atomic-collision Processes in the Presence of a Strong Laser Field.*
- Dortmund, FLASY12, Flavor Symmetries and Consequences in Accelerators and Cosmology (30.06.-04.07.2012)
- Barry, J.:**  
*Sterile neutrinos for warm dark matter and the reactor anomaly in flavor symmetry models.*
- Heeck, J.:**  
*Local Flavor Symmetries.*
- Holthausen, M.:**  
*Natural Vacuum Alignment from Group Theory.*
- Lindner, M.:**  
*keV sterile neutrinos as dark matter.*
- Schmidt, D.:**  
*Direct Detection of Dark Matter in a Model with Radiative Neutrino Masses.*
- Dresden, Germany, International Workshop "Laser-Plasma Interaction at Ultra-High Intensity" (16.04.-20.04.2012)
- Di Piazza, A.:**  
*Tests of classical and quantum electrodynamics with strong laser fields.* (plenary talk)
- Dresden, Germany, International Workshop on Atomic Physics (26.11.-30.11.2012)
- Evers, J.:**  
*X-ray quantum optics with nuclei.*
- Pálffy, A.:**  
*X-rays and nuclei: From controlling single x-ray photons to isomer depletion via photons and electrons.*
- Pfeifer, T.:**  
*Time- and spectral-state-resolved measurement and Fano control of two excited electrons in He.*
- Dubna, Russia, seminar at DLNP, JINR (03.07.2012)
- Lubashevskiy, A.:**  
*Investigation and development of the methods of background suppression for GERDA experiment with low-background test facility LArGe.*
- Eltville, Germany, HIM-Workshop, Kloster Eberbach, (13.11.2012)
- Blaum, K.:**  
*Precision Tests of Fundamental Symmetries with Matter and Antimatter.*
- Eltville, Germany, International Conference on Precision Physics of Simple Atomic Systems (PSAS) (15.06.2012)
- Wagner, A.:**  
*High-precision measurement of the g-factor of the electron bound in hydrogen- and lithiumlike silicon  $^{28}\text{Si}^{11+},^{13+}$ .*
- Faro, Portugal, International Topical Conference on Plasma Science: Advanced Plasma Concepts (ITCPS 2012) (24.09.-28.09.2012)
- Keitel, C. H.:**  
*Quantum Vacuum, Electrons And Ions In Extremely Strong Laser Pulses.*
- Florence, Italy, GGI, WHAT IS  $\nu$ ? From new experimental neutrino results to a deeper understanding of theoretical physics and cosmology, Invisibles12 and Alexei Smirnov Fest (25.06.-29.06.2012)
- Akhmedov, E.:**  
*Paradoxes of neutrino oscillations.*
- Lindner, M.:**  
*Sterile neutrinos as warm dark matter.*

**Schwetz-Mangold, T.:**

*Review of global fits.*

Gaithersburg, MD, USA, 8<sup>th</sup> International Conference on Atomic and Molecular Data and Their Applications, ICAMDA-TA-2012 (30.09.-04.10.2012)

**Wolf, A.:**

*Storage Ring Experiments on Electron–Molecular-Ion Interaction.*

Galveston, USA, Gordon research conference on photoions, photoionization & photodetachment (19.02.-24.02.2012)

**Moshhammer, R.:**

*XUV induced molecular dynamics.*

Garching, Germany, Frontiers in Intense Laser-Matter Interaction Theory Symposium (19.09.-21.09.2012)

**Di Piazza, A.:**

*Testing strong-field CED and QED with intense laser fields.*

**Keitel, C. H.:**

*Electrons, ions and nuclei in extremely intense laser pulses.*

Gatchina, Russia, International Workshop "Hadron Structure and QCD" (HSQCD'2012) (04.07.-08.07.2012)

**Schmelling, M.:**

*The LHCb experiment.*

Geneva, Switzerland, 2<sup>nd</sup> Workshop on European Strategy for Neutrino Physics (14.05.-16.05.2012)

**Rodejohann, W.:**

*Sterile Neutrinos from low energy to the GUT scale.*

Geneva, Switzerland, CERN Summer Student Program 2012 (05.07.-11.07.2012)

**Voss, W.:**

*Introduction to Statistics and Machine Learning.*

Geneva, Switzerland, TSR@ISOLDE workshop, CERN (29.10.-30.10.2012)

**Blaum, K.:**

*The TSR@ISOLDE Project.*

**Grieser, M.:**

*Overview of the Heavy Ion Storage Ring TSR.*

Glasgow, United Kingdom, International endeavor to establish Laser-Based High Energy Physics and Applications Conference (13.11.-15.11.2012)

**Di Piazza, A.:**

*Investigating the QED vacuum with ultra-intense laser fields.*

Göttingen, DPG Frühjahrstagung (27.02.-02.03.2012)

**Barry, J.:**

*Sterile neutrinos for warm dark matter and the reactor anomaly in flavor symmetry models.*

**Heisel, M.:**

*A liquid argon scintillation veto for GERDA and LArGe.*

**Holthausen, M.:**

*Natural Vacuum Alignment from Group Theory.*

**Schmidt, D.:**

*Direct Detection of Leptophilic Dark Matter in a Model with Radiative Neutrino Masses.*

Göteborg, Sweden, Nobel Symposium NS152 - Physics with Radioactive Beams (13.06.2012)

**Blaum, K.:**

*Precision Mass Measurements on Radioactive Ions for Nuclear Astrophysics and Fundamental Studies.*

Göteborg, Sweden, 44<sup>th</sup> Conference of the European Group on Atomic Systems (EGAS 2012) (09.07.-13.07.2012)

**Kellerbauer, A.:**

*Towards Laser Cooling of Atomic Anions.*

Hakone, Japan, Workshop „Exploring nonthermal Universe with ASTRO-H“ (16.05.-18.05.2012)

**Aharonian, F.A.:**

*X-ray emission of secondary electrons as a tool for probing hadronic sources.*

Hamburg, Germany, DESY PIER Colloquium (24.02.2012)

**Crespo-López-Urrutia, J.R.:**

*The Universe in the Lab: X-ray laser spectroscopy of highly charged ions.*

- Hamburg, Germany, DESY Theory Workshop 2012 (25.09.-28.09.2012)  
**Dürr, M.:**  
*Multi-Component Dark Matter Systems and Their Observation Prospects.*  
**Lindner, M.**  
*Beyond the Standard Model from a Neutrino Perspective.*  
**Zhang, He:**  
*Sterile Neutrinos in Flavor Symmetry Models.*
- Hamburg, Germany, DESY, XFEL Meeting Science with Seeded SASE Beams (19.07.2012)  
**Crespo-López-Urrutia, J.R.:**  
*Astrophysics and X-ray metrology with highly charged ions with a seeded XFEL.*
- Hamburg, Germany, FLASH Endstations Meeting (18.07.-19.07.2012)  
**Wolf, A.:**  
*Fast Ion Beams and TIFF.*
- Hamburg, Germany, HAP-Theory-meeting at DESY (22.02.-23.02.2012)  
**Lindner, M.:**  
*Sterile neutrinos and warm dark matter.*
- Hamburg, Germany, Workshop "Science with seeded FEL beams" (19.07.-20.07.2012)  
**Evers, J.:**  
*Nuclear quantum optics with seeded FEL beams.*
- Hamburg, Germany, Workshop on "Dynamical Correlations in Quantum Matter: From Few- to Many-Body Systems"  
(30.05.-01.06.2012)  
**Ullrich, J.:**  
*Ultrafast Dynamics at Free-Electron Lasers.*
- Hamburg, Germany, Workshop on Science at FELs (15.07.-18.07.2012)  
**Ullrich, J.:**  
*New Light for Atomic, Molecular and Optical Physics ... and Beyond.*
- Hefei, China, Flavor Physics and CP Violation (21.05.-25.05.2012)  
**Rodejohann, W.:**  
*Status of the PMNS matrix.*
- Heidelberg, Germany, 5<sup>th</sup> International Symposium on High-Energy Gamma-Ray Astronomy (09.07.-13.07.2012)  
**Rieger, F.M.:**  
*On the origin of VHE gamma-rays from radio galaxies.*
- Heidelberg, Germany, Festival "20 Jahre Schola Heidelberg / ensemble aisthesis" (14.09.-16.09.2012)  
**Weidenmüller, H.-A.:**  
*Die Rolle des Zufalls in der Physik.*
- Heidelberg, Germany, Heidelberg Graduate Days (08.10.-12.10.2012)  
**Sturm, S.:**  
*Lecture series „Physics of Antimatter and Precision Experiments“.*
- Innsbruck, Austria, 100 Years of Cosmic Particles (01.05.-03.05.2012)  
**Hofmann, W.:**  
*Multi-Messenger Astrophysics VI: CR Secondaries: Gamma.*  
**Völk, Heinrich J.:**  
*Galactic Cosmic Rays.*
- Jerusalem, Israel, Annual Meeting of the Israel Physical Society (09.12.2012)  
**Blaum, K.:**  
*Precision Penning-trap mass measurements on exotic ions for nuclear astrophysics and fundamental studies.*
- Jerusalem, Israel, Workshop: "Dynamical Processes in Space and Astrophysical Plasmas" (28.04.-08.05.2012)  
**Kirk, J.G.:**  
*Pulsar-winds and their termination shocks.*
- Jurata, Poland, VIIth Workshop on Atomic and Molecular Physics (VII WAMP '12) (10.09.-14.09.2012)  
**Ullrich, J.:**  
*Pump-Probe Experiments at FELs.*

- Kanazawa, Japan, Japanese-German Symposium on Neutrino, Dark Matter, Higgs and Beyond the Standard Model (01.10.-03.10.2012)  
**Dürr, M.:**  
*Neutrinoless Double Beta Decay and Neutrino Masses.*
- Heeck, J.:**  
*Exotic Charges, Multicomponent Dark Matter and Light Sterile Neutrinos.*
- Holthausen, M.:**  
*Natural Vacuum Alignment from Group Theory.*
- Lim, K.S.:**  
*Planck scale boundary conditions and the Higgs mass.*
- Rodejohann, W.:**  
*Neutrinoless Double Beta Decay and Particle Physics.*
- Schmidt, D.:**  
*Radiative Neutrino Masses and Dark Matter.*
- Kassel, Germany, Nano 3D Conference (18.09.-19.09.2012)  
**Ullrich, J.:**  
*Free-Electron Lasers: Nano-Plasma and Coherent Imaging.*
- Kaufbeuren, Germany, Symposium "Symmetries and Phases in the Universe" (27.02.-01.03.2012)  
**Hofmann, W.:**  
*High Energy Astronomy.*
- Kolkata, India, Biennial Meeting of the Atomic, Molecular and Optical Physics Society of India (ISAMP) (14.12.-17.12.2012)  
**Ullrich, J.:**  
*Free-Electron Lasers: New Frontiers in Atomic and Molecular Research ... and Beyond.*
- Kyoto, Japan, XXV International Conference on Neutrino Physics and Astrophysics (Neutrino 2012) (03.06.-09.06.2012)  
**Schwetz-Mangold, T.:**  
*Status of sterile neutrino oscillations.*
- Lanzarote, Canary Islands, Spain, 7<sup>th</sup> International Workshop on Diffraction in High-Energy Physics (10.09.-15.09.2012)  
**Volyanskyy, D.:**  
*Forward physics at LHCb.*
- Lecce, Italy, 6<sup>th</sup> International Workshop on Quantum Chromodynamics: Theory & Experiment (18.06.-21.06.2012)  
**Volyanskyy, D.:**  
*Soft QCD and onia production with LHCb.*
- Les Houches, France, Winter School (09.01.2012-13.01.2012)  
**Crespo López-Urrutia, J.R.:**  
*Highly charged ions: Diagnostic of hot astrophysical plasmas in traps.*
- Lenzkirch, Germany, VIII Tours Symposium on Nuclear Physics and Astrophysics (02.09.-07.09.2012)  
**Rieger, F.M.:**  
*Particle Acceleration to Ultra-High Energies.*
- Linz, Austria, Workshop on Future Prospects in Many-Body Theory (26.06.2012)  
**Weidenmüller, H.-A.:**  
*Nuclear Reactions induced by a Zeptosecond Multi-Mev Laser Pulse: A Progress Report.*
- Lund, Sweden, Workshop on "Visions for Swedish X-ray Laser Facilities" (24.09.2012)  
**Moshhammer, R.:**  
*Time-resolved experiments with XUV laser pulses.*
- Lyon, France, Neutrinos at the Forefront of Elementary Particle Physics and Astrophysics (22.10.-24.10.2012)  
**Schwetz-Mangold, T.:**  
*Neutrino oscillations: phenomenological overview.*
- Madrid, Spain, XVIII IFT-UAM/CSIC Christmas Workshop (18.12.-20.12.2012)  
**Akhmedov, E.:**  
*Neutrino oscillations: theory and phenomenology.*
- Mahabaleswar, India, 12<sup>th</sup> Workshop on High Energy Physics Phenomenology (02.01.-15.01.2012)  
**Rodejohann, W.:**



*Tribimaximal lepton mixing: models, deviations and alternatives.*  
*Neutrinoless double beta decay.*

Mainz, Germany, DPG Spring Meeting Section Hadrons and Nuclei (22.03.2012)

**Kreim, S.:**

*Präzisionsmassenmessungen an ISOLTRAP für Kernstruktur- und Astrophysik.*

Matsue, Japan, 16<sup>th</sup> International Conference on Electromagnetic Isotope Separators and Techniques Related to their Applications (EMIS2012) (06.12.2012)

**Nagy, Sz.:**

*Recent highlights in Penning-trap mass spectrometry.*

Merida, Mexico, 18<sup>th</sup> International Symposium on Particles, Strings and Cosmology - PASCOS 2012 (03.06.-08.06.2012)

**Lindner, M.:**

*Neutrinos and Dark Matter.*

Metz, France, Colloque commun Physique Atomique, Moléculaire et Optique de la Société Française de Physique (PA-MO) et des Journées de Spectroscopie Moléculaire (JSM) (03.07.-06.07.2012)

**Krantz, C.:**

*Perspectives expérimentales pour les collisions électron-ion avec l'anneau cryogénique CSR.*

Meudon, France, Workshop CIAS 2012 (06.06.-08.06.2012)

**Zhang, He:**

*Sterile neutrinos for Warm Dark Matter in favor symmetry models.*

Miami, USA, MIAMI 2012 (13.12.-20.12.2012)

**Lindner, M.:**

*Sterile neutrinos as dark matter.*

Milano, Italy, ATTOFEL Workshop (30.10.-31.10.2012)

**Moshhammer, R.:**

*Time-resolved experiments with atoms and molecules using XUV and IR laser pulses.*

Milton-Keynes, UK, Royal Society Meeting on Chemistry, Astronomy and Physics of H<sub>3</sub><sup>+</sup> (09.02.-12.02.2012)

**Kreckel, H.:**

*Storage Ring Measurements of the Dissociative Recombination of H<sub>3</sub><sup>+</sup>.*

Montpellier, France, 16<sup>th</sup> International Conference in Quantum Chromodynamics (01.07.-06.07.2012)

**Britsch, M.:**

*Inclusive particle production at LHCb.*

Mumbai, India, International Workshop on Highly Charged Ions (WHCI 2012) (28.03.-31.03.2012)

**Fischer, D.:**

*Ion-lithium collision dynamics studied with a MOTReMi.*

Mumbai, India, TIFR, TeV Particle Astrophysics 2012 (TeVPA 2012) (10.12.-14.12.2012)

**Schwetz-Mangold, T.:**

*Analysis of dark matter direct detection results.*

München, Germany, Workshop „The CTA EBL and Cosmology Physics Case“ (28.11.-30.11.2012)

**Inoue, S.**

*The EBL at High Redshifts.*

Mysore, Indien, 39<sup>th</sup> COSPAR Scientific Assembly (13.07.-21.07.2012)

**Kirk, J.G.:**

*The dissipation of Poynting flux at pulsar-wind termination shocks.*

Nanjing, China, 4<sup>th</sup> Sino-Germany Frontiers of Science Symposium (SINOFGOS), organized by the Alexander von Humboldt-Foundation (AvH) and the Chinese Academy of Sciences (CAS) (25.04.-29.04.2012)

**Pfeifer, T.:**

*Frontiers in Ultrafast Spectroscopy of Fundamental Electronic Processes.*

Nijmegen, Netherlands, Nijmegen School on Astroparticle Physics 2012 (25.07.-03.08.2012)

**Lindner, M.:**

*Neutrino Properties.*

- Nîmes, France, COLDBEAMS-Workshop 2012 (30.09.-03.10.2012)  
**Krantz, C.:**  
*GaAs Photo-Cathodes as Sources for Low-Velocity Electron Coolers.*
- Nottingham, UK, Workshop on free electron lasers in chemistry (23.04.-24.04.2012)  
**Moshhammer, R.:**  
*Studying molecular dynamics with XUV FEL radiation.*
- Obergurgl, Austria, 5<sup>th</sup> Winter School of the Heidelberg Graduate School on Fundamental Physics (21.01.-25.01.2012)  
**Evers, J.:**  
*X-ray quantum optics.*  
**Kellerbauer, A.:**  
*Antimatter Experiments in Traps and Beams.*
- Obergurgl, Austria, European Conference on trapped ions (ECTI) 2012 (10.09.-14.09.2012)  
**Sturm, S.:**  
*The g-factor of the bound electron: A stringent test of bound-state quantum electrodynamics.*
- Opatija, Croatia, Nuclear Structure and Dynamics (09.06.-13.06.2012)  
**Cakirli, R.B., Blaum K., Casten, R.F.:**  
*Correlations in structure between masses and spectroscopic observables.*
- Orange County, CA, USA, Annual Meeting of the APS Division of Atomic, Molecular and Optical Physics (DAMOP 2012) (04.06.-08.06.2012)  
**Fischer, D.:**  
*Ion-lithium collision dynamics studied with a MOTReMi.*
- Padova, Italy, EURORIB Conference (22.05.2012)  
**Kreim, S.:**  
*What Masses can teach us about stellar evolution.*
- Paris, France, APC Colloquium (03.04.2012)  
**Lindner, M.:**  
*Neutrinos as Probes of new Physics.*
- Paris, France, Meeting "Science with PW-class lasers" (23.01.-24.01.2012)  
**Di Piazza, A.:**  
*Theoretical perspectives with Petawatt-class lasers.*
- Paris, France, Workshop „Searching for the sources of galactic cosmic rays“ (12.12.-14.12.2012)  
**Aharonian, F.A.:**  
*Origin of Galactic Cosmic Rays: Theory. (Summary talk)*
- Peterhof, Russia: 23<sup>rd</sup> Russian Particle Accelerator Conference (24.09.-28.09.2012)  
**Wolf, A.:**  
*Low-Energy Ion Beam Storage and eV Electron Cooling.*
- Rehovot, Israel, Workshop on "Fundamental Interactions with Atoms & Ion Traps", Weizmann Institute of Science (02.12.-06.12.2012)  
**Blaum, K.:**  
*Precision measurements of radioactive ions for nuclear astrophysics and fundamental studies.*  
**Crespo-López-Urrutia, J.R.:**  
*Trapped highly charged ions and X-rays for fundamental physics.*  
**Sturm, S.:**  
*The g-factor of the bound electron: Test of QED and access to fundamental constants.*
- Riezlern, Austria, Workshop of Accelerator and Plasma Physics (11.03.-17.03.2012)  
**von Hahn, R.**  
*Status of the CSR.*
- Riezlern, Austria, Workshop on extreme atomic systems (EAS) (05.02.-10.02.2012)  
**Moshhammer, R.:**  
*Pump-probe experiments with molecules at FLASH.*

- Ringberg Castle, Germany, Third Ringberg Meeting on Science with FELs (18.02.2012)  
**Schnorr, K.:**  
*Tracing Interatomic Coulombic Decay of Neon Dimers by XUV-pump-XUV-probe Experiments at FLASH.*
- Ringberg Castle, Germany, Ringberg Meeting on Science with FELs 2012 (04.03.-07.03.2012)  
**Pfeifer, T.:**  
*Noise-enhanced temporal resolution of quantum dynamics in D2 and energy-resolving quasi-classical dissociation pathways in I2.*
- Rostock, Germany, International Conference on the Physics of Nonideal Plasmas (PNP-14) (09.09.-14.09.2012)  
**Keitel, C. H.:**  
*Extremely high-intensity laser interactions with fundamental quantum systems.*
- Samarkand, Uzbekistan, VIII International Conference Modern Problems of Nuclear Physics (25.09.-28.09.2012)  
**Smolnikov, A.:**  
*Neutrinoless double beta decay searching for.*
- Schladming, Austria, Winter School 2012, Prospects of Particle Physics (25.02.-03.03.2012)  
**Lindner, M.:**  
*Status and Prospects of Dark Matter and Neutrino Physics.*
- Schloss Waldthausen, Budenheim, ICD Kick-off Meeting (16.01.2012)  
**Schnorr, K.:**  
*Tracing Interatomic Coulombic Decay of Neon Dimers by XUV-pump-XUV-probe Experiments at FLASH.*
- Seattle, USA, Nuclear Physics Symposium "Bertschfest", University of Washington (07.09.2012)  
**Weidenmüller, H.-A.:**  
*Nuclear Reactions induced by a Zeptosecond Multi-Mev Laser Pulse: A Progress Report.*
- Shanghai, China, 4<sup>th</sup> International Workshop on the Physics at EBITs and Advanced Research Light Sources (PEARL 2012) (04.10.-06.10.2012)  
**Ullrich, J.:**  
*New Light: Atomic, Optical, Molecular Physics ... and Beyond.*
- Shenzhen, China, International Symposium on Neutrino Physics and Beyond (23.09.-26.09.2012)  
**Rodejohann, W.:**  
*Neutrinoless Double Beta Decay: Neutrinos and Beyond.*
- Snowbird, Utah, USA, 42<sup>nd</sup> Winter Colloquium on the Physics of Quantum Electronics (02.01.-06.01.2012)  
**Buth, C.:**  
*High-order harmonic generation enhanced by intense x rays.*
- St. Malo, France, International Conference on Electron Spectroscopy (ICISS 2012) (16.09.-21.09.2012)  
**Ullrich, J.:**  
*New avenues to explore ultrafast dynamics at Free-Electron Lasers.*
- St. Petersburg, USA/FL, CIPANP 2012 - Eleventh Conference on the Intersections of Particle and Nuclear Physics (29.05.2012)  
**Blaum, K.:**  
*Precision Penning-trap mass measurements for fundamental studies.*
- Stará Lesná, Slovakia, Conference on Precision Physics and Fundamental Physical Constants 2012 (10.09.-14.09.2012)  
**Oreshkina, N.:**  
*Precision calculations of the structure of astrophysically relevant Fe ions.*
- Stockholm, Sweden, Symposium on Trends in Ion Physics, Symposium in connection with the retirement of Professor Reinhold Schuch (19.09.-21.09.2012)  
**Blaum, K.:**  
*High precision mass measurements on exotic ions.*  
**Ullrich, J.:**  
*New Science Avenues at Novel Light Sources.*  
**Wolf, A.:**  
*Electron Cooling and Electron-Ion Recombination.*
- Stuttgart, Germany, DPG-Frühjahrstagung Section Atomic, Molecular and Optical Physics (12.03.-16.03.2012)  
**Crespo-López-Urrutia, J.R.:**

*X-ray laser spectroscopy at the free electron laser LCLS.*

**Eronen, T.:**

*Recent atomic mass measurement results from JYFLTRAP.*

**Harman, Z.:**

*Test of fundamental physics with highly charged ions. (main talk)*

**Kreim, S.:**

*Präzisionsmassenmessungen an ISOLTRAP für Kernstruktur- und Astrophysik.*

**Wagner, A.:**

*g-factor measurements of the electron bound to hydrogen- and lithiumlike silicon.*

Suzhou, China, Workshop on Super Intense Laser-Atom Physics (SILAP 2012) (23.09.-26.09.2012)

**Bauke, H.:**

*Relativistic quantum dynamics in extremely intense laser pulses.*

**Hatsagortsyan, K. Z.:**

*Coloumb focusing in elliptically polarized mid-infrared laser fields.*

Tokyo, Japan, International Workshop on Laser Science (IWLS) (05.10.-06.10.2012)

**Ullrich, J.:**

*Next-Generation Light for Highly-Charged Ions.*

Trento, Italy, ECT\* Workshop Towards a solution of the Double Beta Decay Problem (03.09.-07.09.2012)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

Trieste, Italy, Workshop: Behind the Neutrino Mass - "BeNe 2012" (17.09.-21.09.2012)

**Barry, J.:**

*Light sterile neutrinos: double beta decay and flavour symmetries.*

**Maneschg, W.:**

*Progress in Onbb decay search and the GERmanium Detector Array.*

**Lindner, M.:**

*Sterile neutrinos as dark matter.*

**Schwetz-Mangold, T.:**

*Neutrino masses and mixings from global data.*

Valencia, Spain, UNILHC 2012: 2nd ITN School on Unification in the era of LHC (27.08.-06.09.2012)

**Lindner, M.:**

*EW symmetry breaking.*

Vancouver, Canada, Physics at LHC – 2012 (04.-09.06.2012)

**Fontana, M.:**

*Measurements of particle production and energy flow in pp collisions at  $\sqrt{s}=7$  TeV with the LHCb experiment.*

Varenna, Italy, 13<sup>th</sup> International Conference on Nuclear Reaction Mechanisms (10.06.-15.06.2012)

**Pálffy, A.:**

*Level density for large number of particle-hole states.*

**Weidenmüller, H.-A.:**

*Some Open Problems in the Statistiocal Theory of Nuclear Reactions.*

Vienna, Austria, 9<sup>th</sup> International Topical SPARC Workshop (26.11.-28.11.2012)

**Blaum, K.:**

*Status of the FLAIR Collaboration.*

**Di Piazza, A.:**

*Quantum electrodynamical processes in intense laser and atomic fields.*

**Fischer, D.:**

*Recoil experiments at high and low gamma values at HESR and CRYRING.*

Vladivostok, Russia, EXON 2012 (01.06.-06.10.2012)

**Eliseev, S.:**

*Penning Trap Mass Spectrometry for Double-Electron Capture.*

Voronezh, Russia, 62<sup>th</sup> International conference "Nucleus-2012" (25.06.-30.06.2012)

**Lubashevskiy, A.:**

*Investigations and development of the suppression methods of the background in the LArGe low-background test facility for the GERDA experiment.*



**Smolnikov, A.:**

*New generation of experiments aimed to search for neutrinoless double beta decay.*

Warsaw, Poland, From the Planck Scale to the Electroweak Scale (Planck 2012) (28.05.-01.06.2012)

**Holthausen, M.:**

*Natural Vacuum Alignment from Group Theory.*

Zeuthen, Germany, Workshop Astroteilchenphysik in Deutschland: Status und Perspektiven (20.09.-21.09.2012)

**Kopp, J.:**

*Neutrino Oscillations – Status and Perspectives.*

**Lindner, M.:**

*Direct dark matter search with XENON100 and XENON1T.*

Zielona Góra, Poland, Electromagnetic Radiation from Pulsars and Magnetars (24.-27.04.2012)

**De los Reyes, R.** and Rudak, B. for the CTA consortium

*Pulsars at Very-High Energies: prospects for CTA.*

## At Other Institutes

### Aharonian, F.A.:

*Astrophysics and Cosmology with the next generation of gamma-ray detectors.*  
Paris, France, Seminaire du Campus Parisien, IAP (11.01.2013)

### Ahrens, S.:

*Spin dynamics in the Kapitza-Dirac effect.*  
Düsseldorf, Germany, Institut für Theoretische Physik I, Heinrich-Heine-Universität Düsseldorf, Seminar über spezielle Probleme der relativistischen Licht-Materie-Wechselwirkung (13.07.2012)

### Akhmedov, E:

*Sterile neutrinos and oscillation coherence for neutrinos produced in decays.*  
Wuerzburg, Germany, University of Wuerzburg Particle Theory Group seminar (24.05.2012)

### Ascher, P.:

*Studies on an exotic decay mode: the two-proton radioactivity.*  
ISOLDE Physics Group Seminar, CERN, Geneva, Switzerland (26.09.2012)

### Augustin, S.:

*Interference effects in Electron-Positron Pair Creation by the Interaction of a Bichromatic Laser Field and a Nucleus.*  
Düsseldorf, Germany, Institut für Theoretische Physik I, Heinrich-Heine-Universität Düsseldorf, Seminar über spezielle Probleme der relativistischen Licht-Materie-Wechselwirkung (06.07.2012)

### Barkov, M.V.:

*Close binary progenitors of gamma-ray bursts and hypernovae.*  
Moscow, Russia, The Institute of Astronomy of the RAS (07.06.2012) and  
Tübingen, Germany, University of Tübingen, Institute for Astronomy and Astrophysics (29.11.2012)  
*Gamma-ray flares from AGN jet – Red Giant interactions.*  
Moscow, Russia, The Astro Space Centre of the Lebedev Physical Institute of the RAS (26.12.2012)

### Bauke, H.:

*Computational Relativistic Quantum Dynamics.*  
Heidelberg, Germany, The Heidelberg Chapter of SIAM, Interdisziplinäres Zentrum für Wissenschaftliches Rechnen  
Universität Heidelberg, Public Lecture (30.10.2012)

### Bernlöhr, K.:

*Tscherenkow-Teleskope in der Gamma-Astronomie.*  
Heidelberg, Haus der Astronomie (06.03.2012)

### Blaum, K.:

*Precision Penning Trap Experiments with Stored and Cooled Exotic Ions.*  
Zürcher Physikerkolloquium, ETH Zürich (8.03.2012)  
*Geladene in Haft - Präzisionsexperimente mit gespeicherten exotischen Ionen.*  
Kolloquium TU Kaiserslautern (30.04.2012)  
*Precision Measurements of Ground State Properties for Nuclear Structure Studies.*  
EMMI-Kolloquiumsreihe GSI Helmholtzzentrum für Schwerionenforschung Darmstadt (02.05.2012)  
*Die Weizsäcker'sche Massenformel – Messungen von Massen früher und heute.*  
Festkolloquium Leopoldina Halle (22.06.2012)  
*Fundamental tests of nature with stored and cooled ion.*  
Eröffnung der Research School for Advanced Photon Science des Helmholtz Instituts Jena (28.06.2012)  
*Nuclear Masses for Astrophysics.*  
Joint Nuclear Astrophysics Seminar – JONAS, TU Darmstadt (22.11.2012)  
*Wie Gold entsteht - oder: Warum ist Eisen häufiger als Gold?*  
Vortragsreihe "Faszination Astronomie", Haus der Astronomie, Heidelberg, Germany (13. + 20.12.2012)

### Bozorgnia, N.:

*Ion channeling and directional patterns in dark matter detection.*  
Goettingen, Germany, Universität Goettingen (21.11.2012)

### Cakirli, R.B.:

*Relation of masses and spectroscopic observables to structure – Masses, Radii, Spectroscopic Observables.*  
Istanbul University, Turkey (15.06.2012)

**Casanova, S.:**

*Cosmic ray propagation and interaction in the Galaxy.*

Observatory of Cracow, Poland (01.06.2012)

**Cavaletto, S. M.:**

*X-ray Resonance Fluorescence and Rabi Flopping for Ultrafast and Intense Pulses.*

Argonne, Illinois, United States of America, Argonne National Laboratory, X-ray Science Division/Atomic, Molecular and Optical Physics Group (XSD/AMO) Special Presentation (15.06.2012)

**Crespo López-Urrutia, J.R.:**

*Laser spectroscopy goes into the X-ray region.*

Louvain-La-Neuve, Belgium, University, Graduiertenschule (27.01.2012)

*X-ray laser spectroscopy of plasmas: reproducing the surroundings of black holes in the laboratory.*

Erlangen, Germany, Universität Erlangen (02.02.2012)

*X-ray laser spectroscopy of highly charged ions in an electron beam ion trap.*

Graz, Austria, TU Graz, Institut für Experimentalphysik (10.05.2012)

*X-ray laser spectroscopy of highly charged ions at LCLS.*

Stockholm, Sweden, Stockholm University (14.05.2012)

*X-ray metrology with highly charged ions for astrophysics, fusion research, and fundamental studies.*

Hamburg, Germany, Astrophysik-Metrologie EBIT Meeting (16.07.2012)

*State-of-the-art spectroscopy of highly charged ions.*

Mittelkalbach, Germany, PTB-MPIK Kollaborationsmeeting (20.10.2012)

*Multi-band spectroscopy on highly charged tungsten ions at Hyper-EBIT.*

Heidelberg, Germany, Tungsten Spectroscopy IAEA Meeting MPIK (29.08.2012)

*Electron beam ion traps at and from MPIK.*

Geneva, Switzerland, HIE-EBIS Workshop Meeting CERN (17.10.2012)

*Natural survivors: Highly charged ions from the cores of stars to the rims of black holes.*

Groningen, Netherlands, Groningen University (20.11.2012)

**Dadi, A.:**

*Nuclear Processes in Intense Light-Matter Interaction.*

Düsseldorf, Germany, Institut für Theoretische Physik I, Heinrich-Heine-Universität Düsseldorf, Seminar über spezielle Probleme der relativistischen Licht-Materie-Wechselwirkung (27.04.2012)

**Das, S. K.:**

*Quantum Coherence: From entanglement to Precision measurement of  $^{229}\text{Th}$  Isomeric Energy.*

Saarbrücken, Germany, Physics Department, Universität des Saarlandes, Physics Seminar (04.12.2012)

*Quantum Interference and Coherence in Novel Systems: From Entanglement to the Nuclear Isomeric Clock.*

Copenhagen, Denmark, Niels Bohr Institute, Physics Seminar (22.11.2012)

**Di Piazza, A.:**

*Tests of classical and quantum electrodynamics with intense laser fields.*

Palaiseau, France, Centre de Physique Theorique de l'Ecole Polytechnique, Physics Colloquium (22.06.2012) and Rostock, Germany, Institut für Physik, Universität Rostock, Seminar der AG Q.theorie und Vielteilchensysteme, AG Statistische Physik und AG Molekulare Q.dynamik (12.06.2012)

*Testing strong-field classical and quantum electrodynamics with intense laser fields.*

Belfast, United Kingdom, Queen's University of Belfast, Physics Colloquium (08.05.2012)

**Dorn, A.:**

*Fundamental atomic and molecular ionization reactions induced by electron impact and free electron laser radiation.*

Groningen, Netherlands, KVI, institute seminar (25.01.2012)

*Electron impact ionization of clusters and molecules.*

Darmstadt, Germany, GSI, atomic physics seminar (12.11.2012)

**Dürr, M.:**

*Neutrinoless Double Beta Decay.*

Kanazawa, Japan, Institute for Theoretical Physics, Kanazawa University (17.02.2012)

**Eronen, T.:**

*High-Resolution Atomic Mass Measurements and Separation at Double Penning Trap Setup JYFLTRAP.*

CEN de Bordeaux-Gradignan, France (04.05.2012)

*Mass Spectrometry and Decay Spectroscopy around  $^{132}\text{Sn}$ .*

ISOLDE seminar, CERN, Geneva, Switzerland (24.10.2012)

**Evers, J.:**

*Nuclear Quantum Optics at an XFEL.*

Viligen, Switzerland, Paul Scherrer Institut, SwissFEL Photonics Tutorial (21.11.2012)

*Quantenoptik quer durchs elektromagnetische Spektrum.*

Erlangen, Germany, Department Physik, Friedrich-Alexander Universität Erlangen-Nürnberg, Theory Seminar (27.06.2012) and

Tübingen, Germany, Fachbereiche Physik, Eberhard Karls Universität Tübingen, Theory Seminar (15.05.2012)

*Quantum optics with novel coherent light sources.*

Beijing, China, Institute of Theoretical Physics, Chinese Academy of Sciences, Theory seminar (04.04.2012)

**Fileviez Perez, P.:**

*The Theory of R-parity and Supersymmetry at the LHC.*

Pasadena, CA, USA, California Institute of Technology (Caltech) (06.12.2012)

**Fischer, D.:**

*Atoms and molecules in intense laser fields.*

Darmstadt, Germany, Atomic Physics Seminar, Gesellschaft für Schwerionenforschung GSI (20.11.2012)

**Gärtner, M.:**

*Light propagation in interacting Rydberg EIT media.*

Heidelberg, Germany, Institut für Theoretische Physik, Heidelberg University, Group Seminar Gasenzer (03.12.2012)

**Grobe, R.:**

*Visualization of quantum field theoretical processes with space-time resolution.*

Ulm, Germany, University of Ulm, SFB Colloquium (13.01.2012)

*QED beyond the S-matrix approach?*

Düsseldorf, Germany, Institut für Theoretische Physik I, Heinrich-Heine-Universität Düsseldorf, Seminar über spezielle Probleme der relativistischen Licht-Materie-Wechselwirkung (18.05.2012)

**Heeck, J.:**

*"Hidden"  $O(2)$  and  $SO(2)$  Symmetry in Lepton Mixing.*

Kanazawa, Japan, Group Seminar Institute for Theoretical Physics, Kanazawa University (19.01.2012)

**Hofmann, W.:**

*Astronomy with Cherenkov Telescopes: Probing Cosmic Particle Accelerators.*

Golm, Germany, Kolloquium (15.03.2012) and

Darmstadt, Germany, TU Darmstadt, Kolloquium (13.04.2012)

**Holthausen, M.:**

*Natural Vacuum Alignment from Group Theory.*

München, Germany, Theoretical High Energy Physics Seminar, Technical University (22.06.2012)

**Keitel, C. H.:**

*Relativistic Quantum Optics.*

Beijing, China, Beijing Computational Science Research Center (CSRC), 7<sup>th</sup> CSRC Colloquium on Scientific Frontiers (19.10.2012)

**Kellerbauer, A.:**

*Perspectives pour le refroidissement par laser d'anions d'osmium.*

Laboratoire Aimé Cotton, Paris, France (09.02.2012)

**Kirk, J.G.:**

*Pulsar-wind termination shocks.*

Princeton, NJ, USA, Princeton University, Department of Astronomy (30.01.2012)

**Krantz, C.:**

*Photo Cathodes and Electron Cooling at low Beam Velocities.*

GSI Atomphysik-Seminar, Darmstadt (25.04.2012)

**Kreckel, K.:**

*Laboratory Astrophysics:  $H_2$ , the Universe and Everything.*

Hauskolloquium, Max-Planck-Institut für Astronomie, Heidelberg, Germany (09.03.2012)

*Laboratory Astrophysics: Experiments with Hydrogen Ions, Atoms, and Molecules.*

Astrophysik Seminar, Friedrich-Schiller-Universität, Jena, Germany (24.05.2012)



**Kreim, S.:**

*Recent Results and Achievements of the Penning-trap mass spectrometer ISOLTRAP.*  
GANIL Seminar, Caen, France (14.12.2012)

**Kumar, N.:**

*Relativistic beam-plasma interaction in fast-ignition fusion and astrophysics.*  
Kanpur, India, Indian Institute of Technology Kanpur, Physics Department Colloquium (21.11.2012)

**Lindner, M.:**

*Dunkle Materie und die unsichtbare Welt der Geisterteilchen.*  
Mannheim, Germany, Sternwarte, Vortrag im Rahmen der Vortragsreihe „Die Dunkle Seite des Universums“  
(15.11.2012)

*Die dunklen Seiten des Universums.*  
Heidelberg, Germany, HD (23.10.2012)

*Dunkle Materie.*  
Heidelberg, Germany, Haus der Astronomie (11.10.+12.10.2012)

*Theoretical motivation for precision neutrino physics.*  
Fermilab, USA, 2012 Project X Physics Study (PXPS12) (15.06.2012)

*Sterile neutrinos as warm dark matter.*  
New York University, USA (20.03.2012)

*Neutrinos - Neues von den Geisterteilchen.*  
Mannheim, Germany, Rhein-Neckar-Gesprächskreis, Fachhochschule Mannheim (26.01.2012)

*Neutrinos and Dark Matter as Probes of new Physics.*  
Gießen, Germany, Kolloquium, Universität Gießen (12.01.2012)

**Mochol, I.:**

*Pulsar wind termination shocks.*  
Strasbourg, France, Astrophysics Colloquium, Observatoire Astronomique de Strasbourg (05.10.2012)

**Moshhammer, R.:**

*Time-resolved experiments with atoms and molecules using XUV and IR laser pulses.*  
Freiburg, Germany, Quantum efficiency colloquium, Universität Freiburg (19.06.2012)

**Müller, C.:**

*Multiphoton processes in high-intensity laser fields.*  
Aachen, Germany, RWTH Aachen, Seminar zur Theorie der kondensierten Materie (06.11.2012)

**Nagy, Sz.:**

*Mass measurements for neutrino physics.*  
Graduiertenkolleg und EMG Seminar, Johannes Gutenberg-Universität, Mainz, Germany (25.04.2012)

**Pálffy, A.:**

*Coherent x-ray storage and modulation in nuclei.*  
Heidelberg, Germany, Heidelberg University, Joint University-MPI seminar on atomic physics in strong electromagnetic fields (17.12.2012)

*Coherent light interacting with nuclei: from VUV to gamma rays.*  
Paisley, United Kingdom, Physics Department, University of the West of Scotland, Physics Colloquium (24.10.2012)

*Taming single x-ray photons with nuclei.*  
Glasgow, United Kingdom, Strathclyde University, Scottish Universities Physics Alliance SUPA Colloquium  
(18.10.2012)

*Entanglement and coherent control of single x-ray photons using nuclei.*  
Glasgow, United Kingdom, University of Glasgow, Physics Colloquium (17.10.2012)

*Coherent control of single x-ray photons.*  
Vienna, Austria, Quantum Optics, Quantum Nanophysics and Quantum Information, University of Vienna, Schrödinger Seminar (12.09.2012)

*Coherent nuclear photoexcitation from low-lying collective states to compound nuclei.*  
Bucharest, Romania, University of Bucharest, Theory Seminar (08.02.2012)

**Pfeifer, T.:**

*Shifting paradigms in ultrafast atomic and molecular physics: Precision spectroscopy of two-electron dynamics with attosecond pulses and noise-enhanced temporal resolution at FELs.*

Darmstadt, Germany, Atomphysik Seminar der GSI (17.07.2012) and  
Berkeley, CA, USA, Ultrafast X-ray Science Laboratory (UXSL) Seminar, Lawrence Berkeley National Lab (LBNL)

(12.05.2012) and

Palo Alto, CA, USA, Special AMO Physics Research Seminar at Stanford University (07.03.2012)

*Multidimensional spectroscopy with both meV and attosecond resolution: Observing, understanding, and controlling correlated electron dynamics in atoms and molecules.*

Jena, Germany, IOQ Institute Seminar (15.06.2012)

*Classical and quantum correlated two-electron attosecond dynamics in strong and weak laser fields, observed by coincidence mapping and high-resolution spectroscopy.*

Rostock, Germany, SFB Seminar, Physics Department, Universität Rostock (05.06.2012)

*Integrating attosecond temporal and meV spectral resolution: Precision spectroscopy of laser-dressed correlated two-electron transition states.*

Berlin, Germany, Seminar am Max-Born-Institut (10.01.2012)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

Heidelberg, Germany, MPIK Heidelberg (10.05.2012) and

Dresden, Germany, TU Dresden (14.03.2012)

**Salamin, Y.:**

*Proton acceleration by chirped petawatt laser pulses.*

Heidelberg, Germany, Heidelberg University, Joint University-MPI seminar on Atomic physics in strong electromagnetic fields (19.01.2012)

**Sanchez, D.:**

*Fermi and HESS view of the most energetic AGNs.*

Paris, France, LPNHE, Université de Jussieu, (02.03.2012)

*GeV-TeV Observations of the most energetic blazars : What can we learn about the jet emission and the extragalactic background light.*

Grenoble, France, IPAG, Université de Joseph Fourier, (22.11.2012) and

Annecy, France, LAPP, Université de Savoie, (23.11.2012)

**Schmelling, M.:**

*Herausforderungen und erste Resultate des LHCb Experiments.*

Berlin, Germany, Humboldt-Universität zu Berlin (17.01.2012)

**Schwalm, D.:**

*A femtosecond after the little bang - Coulomb Explosion Imaging with small swift molecules.*

Weizmann Institute of Science, Rehovot, Israel (07.06.2012)

*Laboratory Astrophysics with Storage Rings.*

Ben Gurion University, Beer Sheva, Israel (28.06.2012)

**Schwetz-Mangold, T.:**

*Recent developments in neutrino oscillations.*

Vienna, Austria, Univ. Vienna (24.05.2012)

*Sterile neutrinos at the eV-scale?*

Padova, Italy, Univ. Padova (11.05.2012) and

Paris, France, Laboratoire Astroparticule et Cosmologie (APC) (26.03.2012)

*Results from Dark Matter direct detection and their interpretation.*

Barcelona, Spain, IFAE Barcelona (30.01.2012)

**Sperl, A.:**

*Auto-ionization dynamics of molecular hydrogen using XUV and IR pulses.*

Madrid, Spain, University of Madrid (03.10.2012)

**Sturm, S.**

*The g-factor of the bound electron as test of quantum electrodynamics (QED).*

Institute for Physics (IPH), Mainz, Germany (03.07.2012)

*Breaking the wall off probing the limits of quantum electrodynamics.*

Falling Walls Lab, Berlin, Germany (08.11.2012)

**Ullrich, J.:**

*Free-Electron Lasers: New Frontiers in Atomic and Molecular Research ... and Beyond.*

Zürich, Switzerland, ETH Kolloquium (18.04.2012) and

Kassel, Germany, Kolloquium der Universität Kassel (12.01.2012) and

Greifswald, Germany, Kolloquim der Universität Greifswald (26.04.2012) and  
Braunschweig, Germany, Kolloquim der Universität Braunschweig (05.06.2012)

**Voitkiv, A.B.:**

*Electron-positron pair production in relativistic atomic collisions.*  
Lanzhou, China, Institute of Modern Physics (29.06.2012)

**Volyanskyy, D.:**

*Recent results from LHCb.*  
Karlsruhe, Germany, Karlsruhe Institute of Technology (29.05.2012)

**Weidenmüller, H.-A.:**

*Universal Chaotic Scattering on Quantum Graphs.*  
Strasbourg, France, Theoretisch-Physikalisches Kolloquium, Universität und CNRS (24.09.2012)

**Zhang, He:**

*Exotic Charges and Multicomponent Dark Matter.*  
Aachen, Germany, RWTH Department of Physics (22.11.2012)

*Sterile Neutrino Status.*  
Stockholm, Sweden, Royal Institute of Technology (KTH) (14.11.2012)

*Low-scale seesaw: models and phenomenology.*  
Nanjing, China, Nanjing University, (31.07.2012)

*Seesaw at low-energy scales.*  
München, Germany, Ludwig-Maximilians-Universität München (11.01.2012)

# Invited Talks 2013

## At Conferences and Symposia

Aachen, Germany, EXTATIC Network Workshop (02.10.-04.10.2013)

**Pfeifer, T.:**

*High-harmonic generation and 'Ultrafast' Phenomena in small quantum systems.*

Aarhus, Denmark, European Conference on Atomic and Molecular Physics (ECAMP11) (24.06.-28.06.2013)

**Crespo-López-Urrutia, J.R.:**

*X-ray laser spectroscopy with free-electron lasers and synchrotron radiation.*

**Dorn, A.:**

*Electron and positron impact ionization of atoms, molecules and clusters.*

Águas de Lindóia, São Paulo, Brazil, Encontro Nacional de Física da Matéria Condensada, (13.05.-17.05.2013)

**Fischer, D.:**

*Ion-atom collision dynamics studied with a MOTReMi.*

Allahabad, India, Sangam@HRI Instructional Workshop on Particle Physics (25.03.-30.03.2013)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

*Sterile Neutrinos from low energy to the GUT scale.*

Ames, USA, International Conference "Nuclear Theory in the Superconducting Era", Iowa State University (13.05.2013)

**Weidenmüller, H.-A.:**

*Nuclear Reactions induced by a Zeptosecond Multi-Mev Laser Pulse: Theoretical Expectations.*

Antwerp, Belgium, Workshop on Multi-Partonic Interactions at the LHC (02.12.-06.12.2013)

**Blouw, J.:**

*Studies of soft QCD in the forward region at LHCb.*

Arosa, Switzerland, Second COST IOTA Workshop on Cold Molecular Ions (02.09.-04.09.2013)

**Wolf, A.:**

*Collision Studies using Stored Molecular Ion Beams.*

Asilomar, USA, 13<sup>th</sup> International Workshop on Topics in Astroparticle and Underground Physics (TAUP 2013) (08.09.-13.09.2013)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

**Schwingenheuer B.:**

*Limit on neutrinoless double beta decay of Ge-76 by the GERDA experiment.*

Asilomar, USA, ISOU P 2013 (International Symposium: Opportunities in Underground Physics) (24.05.-27.05.2013)

**Lindner, M.:**

*Review of results of reactor neutrino experiments on neutrino mixing.*

Assergi, Italy, Low Radiation Techniques Workshop 2013 (10.04.-12.04.2013)

**Maneschg, W.:**

*GERDA Phase II detectors: behind the production and characterisation at low background conditions.*

Bad Honnef, Germany, 513. Wilhelm und Else Heraeus-Seminar (14.01.-18.01.2013)

**Blaum, K.:**

*Storage ring facility at HIE-ISOLDE.*

Bad Honnef, Germany, 523. WE-Heraeus Seminar "High Harmonic Spectroscopy" (28.01.-31.01.2013)

**Pfeifer, T.:**

*Multi-dimensional soft-x-ray spectroscopy with high harmonics: Tuning from perturbative to strong coupling of two excited electrons, and Fano control in Helium atoms.*

Bad Honnef, Germany, 530. WE-Heraeus-Seminar: Nuclear Masses and Nucleosynthesis (26.04.2013)

**George, S.:**

*Recent technical advances in Penning trap mass spectrometry.*

**Kreim, S.:**

*Stellar Processes Viewed through Mass Measurements with ISOLTRAP.*



- Bad Honnef, Germany, DPG Summer School on Free-Electron Laser Physics (15.09.-22.09.2013)  
**Ullrich, J.:**  
*Ultra-fast Dynamics Explored with FELs.*
- Barcelona, Spain, Workshop Variable Galactic Gamma-Ray Sources (16.04.-18.04.2013)  
**Barkov, M.:**  
*Direct wind accretion and jet launch in compact binary systems.*  
**Rieger, F.M.:**  
*Extreme particle acceleration in gamma-ray binaries.*
- Beijing, China, 23<sup>rd</sup> International Symposium on Ion Atom Collisions (ISIAC) (19.07.-22.07.2013)  
**Voitkiv, A.B.:**  
*Correlated transfer-ionisation in collisions of fast highly charged ions with helium.*
- Beijing, China, Quantum Optics and New Materials V (26.05.-29.05.2013)  
**Evers, J.:**  
*One, two, many: Cooperative effects in quantum optics.*
- Bergen, Norway, Workshop on Heavy Flavor Correlations in Nuclear Collisions (02.10.-04.10.2013)  
**Schmelling, M.:**  
*Results on proton-lead collisions and flavor correlations at LHCb.*
- Blois, France, 25<sup>th</sup> Rencontres de Blois "Particle Physics and Cosmology (26.05.-31.05.2013)  
**Schwetz-Mangold, T.:**  
*Oscillations with 3, 4, or 5 neutrino generations.*  
**Volyanskyy, D.:**  
*QCD and EW measurements with LHCb.*
- Bloomington, Indiana, USA, 6<sup>th</sup> Meeting on CPT and Lorentz Symmetry (CPT'13) (17.06.-21.06.2013)  
**Kellerbauer, A.:**  
*Measuring the Free Fall of Antihydrogen.*
- Bochum, Germany, Wind Bubbles, Astrospheres and the Heliosphere: Environments and Cosmic Rays, (04.11.-08.11.2013)  
**Casanova, S.:**  
*Transport of cosmic rays.*
- Bonn, Germany, PLANCK 2013 (20.05.13-24.05.13)  
**Holthausen, M.:**  
*CP and Discrete Flavour Symmetries.*  
**Lim, K.S.:**  
*Lepton mixing patterns from a scan of finite discrete groups.*
- Boston, USA, Gordon research conference on X-Ray science (04.08.-09.08.2013)  
**Moshhammer, R.:**  
*Time-resolved experiments with atoms and molecules at FLASH.*
- Budenheim (Schloss Waldthausen), Germany, ICD Research Unit Kick-Off Meeting (16.01.-18.01.2013)  
**Müller, C.:**  
*Dielectronic recombination and resonant photoionization involving two (or more) atoms.*
- Cape Town, South Africa, The 6<sup>th</sup> International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions (03.-08.11.2013)  
**Zavertyaev, M.:**  
*Studies of production in the forward region at LHCb.*
- Columbus, Ohio, USA, FIERO Workshop (20.02.-21.02.2013)  
**Di Piazza, A.:**  
*Classical and Quantum Electrodynamical effects in Intense Laser Fields.*
- Copenhagen, Denmark, 11<sup>th</sup> International Conference on Femtochemistry (FEMTO11) (08.07.-12.07.2013)  
**Pfeifer, T.:**  
*Attosecond Electron Dynamics.*

- Darmstadt, Germany, EMMI Physics Days (18.11.-19.11.2013)  
**Eliseev, S.:**  
*Penning-Trap Mass Spectrometry with SHIPTRAP & PENTATRAP.*
- Darmstadt, Germany, NUSTAR Annual Meeting, GSI (25.02-01.03.2013)  
**Nagy, Sz.**  
*Measurements and Developments with TRIGA-TRAP.*  
**Yordanov, D.:**  
*Recent Developments in Collinear Laser Spectroscopy at COLLAPS.*
- Darmstadt, Germany, RNM-EMMI meeting on "pPb physics at LHC (17.01.2013)  
**Schmelling, M.:**  
*First Analysis of the pPb Pilot Run Data with LHCb.*
- Dornburg, Germany, 2<sup>nd</sup> Workshop Operation of PW-class lasers (13.06.-14.06.2013)  
**Di Piazza, A.:**  
*Intensity measurement of strong laser pulses using nonlinear Thomson scattering.*
- Dresden, Germany, 77. Jahrestagung der DPG und DPG-Frühjahrstagung (04.03.-08.03.2013)  
**Barry, J.:**  
*Lepton number and lepton flavour violation in left-right symmetric theories.*  
**Britsch, M.:**  
*Zerfälle von B- und D-Mesonen in Endzustände aus neutralen Kaonen bei LHCb.*  
**Dürr, M.:**  
*Multi-Component Dark Matter Systems and Their Observation Prospects.*  
*Neutrinoless Double Beta Decay and Lepton Number Violating New Physics.*  
**Heeck, J.:**  
*Multicomponent Dark Matter and Light Sterile Neutrinos.*  
**Heisel, M.:**  
*GERDA status report.*  
**Lim, K.S.:**  
*Lepton mixing patterns from a scan of finite discrete groups.*  
**Lubashevskiy, A.:**  
*Investigation and development of the suppression methods of the 42K background in LArGe.*  
**Marrodán Undagoitia, T. :**  
*Search for dark matter with the XENON100 experiment.*  
**Rodejohann, W.:**  
*Neutrino Majorana Masses: Origin and Phenomenology.*  
**Wagner, S.:**  
*Die Energieskala in Double Chooz.*  
**Weidenmüller, H.-A.:**  
*Nuclear Reactions induced by a Zeptosecond Multi-Mev Laser Pulse: Theoretical Expectations.*
- Dresden, Germany, DPG-Tagung Hadronen und Kerne (06.03.2013)  
**Blaum, K.:**  
*100 Jahre Massenspektrometrie - Präzisionsmassenmessungen an exotischen Nukliden früher und heute. (Plenarvortrag)*
- Dresden, Germany, International Conference for Ultracold Rydberg Physics (08.07.-12.07.2013)  
**Evers, J.:**  
*"Self-assembly" and dissipative dynamics in strongly interacting Rydberg gases.*
- Dresden, Germany, International Workshop on Atomic Physics (25.11.-29.11.2013)  
**Moshhammer, R.:**  
*Pump-probe experiments on single ionization of atoms.*
- Dresden, Germany, Joint IMPRS QED Workshop (13.05.2013)  
**Schnorr, K.:**  
*Tracing Interatomic Coulombic Decay of Neon Dimers by XUV-pump-XUV-probe Experiments at FLASH.*
- Durham, UK, Invisibles Workshop (15.07.-19.07.2013)  
**Marrodán Undagoitia, T. :**  
*Review of direct dark matter searches.*

Durham, UK, Invisibles13 School (09.07.-15.07.2013)

**Bozorgnia, N.:**

*Astrophysics independent tests for inelastic dark matter scattering.*

Eltville (Kloster Eberbach), Germany, Graduate school "Symmetry Breaking in fundamental interactions" (17.09.-19.09.2013)

**Sturm, S.:**

*Precision experiments with trapped ions.*

Erice, Italy, 35<sup>th</sup> International School on Nuclear Physics: Neutrino Physics: present and future (16.09.-24.09.2013)

**Blaum, K.:**

*Precision mass measurements for neutrino physics studies.*

**Lindner, M.:**

*Invited Summary Talk.*

**Rodejohann, W.:**

*Sterile Neutrinos from low energy to the GUT scale.*

Espoo, Finland, 40<sup>th</sup> European Physical Society Conference on Plasma Physics (01.07.-05.07.2013)

**Di Piazza, A.:**

*Superintense laser interactions with fundamental quantum systems.*

Firenze, Italy, 25<sup>th</sup> International Nuclear Physics Conference (INPC 2013) (02.06.-07.06.2013)

**Cakirli, R.B.:**

*Shell structure, emerging collectivity, and valence p-n interactions.*

Fulda, Germany, Helmholtz Graduate School for Hadron and Ion Research (04.11.-08.11.2013)

**Voss, H.:**

*Introduction into Statistical Methods.*

Geneva, Switzerland, CERN, MPI@LHC 2012, Workshop on Multi-Parton Interactions at the LHC (03.12.-07.12.2013)

**Schmelling, M.:**

*First look at the pA pilot run.*

Geneva, Switzerland, CERN ERDIT initial meeting (11.04.-12.04.2013)

**Knöpfle K. T.:**

*Status and Main Challenges for Detectors for Astronomy and Astrophysics.*

Göttingen, Germany, Drittes Deutsch-Japanisches Universitätstreffen (Hekksagon) (11.09.2013)

**Senftleben, A.:**

*Tracing Interatomic Coulombic Decay in the neon dimer via XUV pump-probe.*

Granada, Spain, workshop on "The Innermost Regions of Relativistic Jets and their Magnetic Fields" (10.06.-14.06.2013)

**Kirk, J.G., Mochol, I., Amano, T.**

*Poynting Flux Dissipation in Jets.*

Hamburg, Germany, CFEL at DESY, Workshop on Ion Physics studied with High Energy Photons (23.01.2013)

**Moshhammer, R.:**

*Time-resolved experiments in the XUV.*

**Wolf, A.:**

*Ionization and Fragmentation of Molecular Ions Studied with FELs.*

Hamburg, Germany, DESY Workshop on "Physics in Intense Fields PIF2013" (09.07.-11.07.2013)

**Di Piazza, A.:**

*Nonlinear double Compton scattering in the ultrarelativistic quantum regime.*

**Keitel, C. H.:**

*Ionic and nuclear quantum dynamics in intense low and high-frequency light fields.*

**Kirk, J.G.:**

*Simulation of QED Plasmas.*

**Müller, C.:**

*Spin effects in laser-induced electron-positron pair production.*

Hamburg, Germany, DESY, Photon Science Users' Meeting (27.01.2013)

**Crespo-López-Urrutia, J.R.:**

*X-ray lasers, oscillator strengths and astrophysics.*

Hamburg, Germany, DESY, QCD@LHC2013 (02.09.-06.09.2013)

**Schmelling, M.:**

*Studies of production in the forward region with LHCb.*

Hamburg, Germany, Kick Off Meeting for the Helmholtz International Beamline for Extreme Fields (HIBEF) at the European XFEL (02.06.-05.06.2013)

**Di Piazza, A.:**

*Classical and quantum electrodynamics effects in intense laser fields.*

**Keitel, C. H.:**

*Strong field physics.* (plenary talk)

**Müller, C.:**

*Pair production processes in intense laser fields.*

Hamburg, Germany, Science at FELs Conference (16.07.2013)

**Senftleben, A.:**

*Extreme ultra-violet induced molecular dynamics imaged by three-body coincidences.*

Hamburg, Germany, The 1<sup>st</sup> German-China Young Scientist Symposium on Ultrafast Light Sources and Spectroscopy Applications (24.06.-26.06.2013)

**Ott, C.:**

*Time-Resolved Multi-Dimensional Spectroscopy of Coupled Electron Dynamics with XUV Light.*

Hannover, Germany, 100 Years of Mass Spectrometry (22.03.2013)

**Kreim, S.:**

*High-Accuracy Mass Measurements for Astrophysics.*

Hannover, Germany, DPG-Frühjahrstagung (18.03.-22.03.2013)

**Eliseev, S.:**

*Penning Trap Mass Spectrometry for Double-Electron Capture.*

**Eronen, T.:**

*Towards accurate T-<sup>3</sup>He Q-value.*

**Nagy, Sz.:**

*Mass measurements for neutrino physics.*

**Pfeifer, T.:**

*Attosecond time-resolved high-resolution spectroscopy of two- electron dynamics in helium, and Impulsive Control of Light.*

**Ott, C.:**

*Multidimensional XUV-NIR spectroscopy of electronic dynamics in small quantum systems.*

**Sturm, S.:**

*The g-factor of the bound electron: Test of QED and access to fundamental constants.*

**Sturm, S.:**

*The Standard Model under extreme conditions: The g-factor of highly charged ion.*

Hannover, Germany, ICD Symposium der DPG Frühjahrstagung (21.03.2013)

**Schnorr, K.:**

*Tracing Interatomic Coulombic Decay of Neon Dimers by XUV-pump-XUV-probe Experiments at FLASH.*

Hefei, China, 17<sup>th</sup> International Symposium on (e,2e), Double Photo-ionization and Related Topics (01.08.-03.08.2013)

**Ren, X.:**

*Electron impact induced break-up of molecules: from H<sub>2</sub> to bio-molecules.*

Hefei, China, 1<sup>st</sup> International Symposium on Nanocarbons – Fullerenes, Endofullerenes, Carbon Nanotubes and Carbon Nanostructures (16.06.-21.06.2013)

**Krätschmer W.:**

*The Impact of C<sub>60</sub> in Science.*

Hefei, China, International Symposium on (e,2e), Double Photoionization and Related Topics (01.08.2013)

**Senftleben, A.:**

*Tracing Interatomic Coulombic Decay in the neon dimer via XUV pump-probe.*

**Sperl, A.:**

*Electron Localization involving Doubly-Excited States in Broadband XUV Ionization of H<sub>2</sub>.*



- Heidelberg, Germany, 31<sup>st</sup> Heidelberg Physics Graduate Days (07.10.-11.10.2013)  
**Akhmedov, E:**  
*Neutrino Physics.*
- Heidelberg, Germany, 4<sup>th</sup> High Energy Phenomena in Relativistic Outflows (HEPRO IV) meeting (23.07.-26.07.2013)  
**Zabalza, V.:**  
*Gamma-observations of Gamma-Ray Binaries [IR].*
- Heidelberg, Germany, 5<sup>th</sup> IMPRS-PTFS Seminar (22.05.2013)  
**Schmidt, D.:**  
*New Production Mechanism for keV Sterile Neutrino Dark Matter.*
- Heidelberg, Germany, 5<sup>th</sup> International Workshop on Electrostatic Storage Devices (17.06.-21.06.2013)  
**von Hahn, R.,**  
*Status of the CSR.*  
**Menk, S.:**  
*Electron Autodetachment of Sulfur Hexafluoride Anions.*  
**Moshhammer, R.:**  
*Ion-beam interactions with strong laser pulses.*
- Heidelberg, Germany, 8<sup>th</sup> Heidelberg Astronomy Summer School (09.09.-13.09.2013)  
**Bernlöhr, K.:**  
*Monte Carlo Simulations of air showers and Cherenkov telescopes.*
- Heidelberg, Germany, Internal School on Quantum Dynamics in Physics, Chemistry and Biology, Max-Planck-Institut für Kernphysik, (30.09.2013)  
**Blaum, K.:**  
*Fundamental Tests of Nature with Cooled and Stored Exotic Ions.*
- Heidelberg, Germany, International Workshop on Baryon and Lepton Number Violation (BLV 2013) (08.04.-11.04.2013)  
**Bozorgnia, N.:**  
*Features in directional dark matter detection.*  
**Duerr, M.:**  
*A Gauge Theory for Baryon and Lepton Numbers.*  
**Heeck, J.:**  
*Multicomponent Dark Matter and Light Sterile Neutrinos.*  
**Holthausen, M.:**  
*CP and Discrete Flavour Symmetries.*  
**Lim, K.S.:**  
*Lepton mixing patterns from a scan of finite discrete groups.*  
**Lindner, M.:**  
*From the Cosmos to the LHC.*  
**Maneschg, W.:**  
 *$0\nu\beta\beta$  decay search in 2013: Status and advancements .*  
*Borexino: Latest results and future prospects .*  
**Schmidt, D.:**  
*Radiative Seesaw with Local Symmetry for Neutrino Masses and Dark Matter.*  
**Schwetz-Mangold, T.:**  
*The Decade of the WIMP.*  
**Wagner, S.:**  
*The Double Chooz Experiment.*
- Heidelberg, Germany, University Heidelberg, Symposium on High Energy Astrophysics (20.02.2013)  
**Rieger, F.M.:**  
*High Energy Processes near Supermassive Black Holes.*
- Hirschegg, Austria, International Workshop XLI on Gross Properties of Nuclei and Nuclear Excitations (31.01.2013)  
**Kreim, S.:**  
*Mass Measurements with ISOLTRAP for Nuclear Structure and Astrophysics.*
- Illa da Toxa, Spain, International Conference on the Initial Stages in High-Energy Nuclear Collisions (08.09.-14.09.2013)  
**Blouw, J.:**  
*Quarkonia and heavy flavor in pPb at LHCb.*

- Jachranka near Warsaw, Poland, Quantum Optics VIII (26.05.-01.06.2013)  
**Keitel, C. H.:**  
*Extremely high-intensity laser interactions with fundamental quantum systems.*
- Jena, Germany, 10<sup>th</sup> topical workshop of Stored Particles atomic physics research collaboration, SPARC Workshop 2013 (28.10.-30.10.2013)  
**Müller, C.:**  
*Ionization, Recombination and Pair Production in Intense Laser-Ion Interactions.*  
**O'Connor, A.:**  
*Laboratory studies of gas phase reactions.*  
**Sturm, S.:**  
*The g-factor of highly-charged ions and a new electron mass.*
- Jena, Germany, Workshop on "Quantum Electrodynamics in Strong Electromagnetic Fields" (02.07.2013)  
**Harman, Z.:**  
*Optical control of the x-ray emission of highly charged ions. (main talk)*
- Kassel, Germany, Laboratory astrophysics meeting 2013 (30.09.-02.10.2013)  
**O'Connor, A.:**  
*Slow ion collisions for astrochemistry.*
- Kolymbari, Crete, Greece, International Conference on New Frontiers in Physics (28.08.-05.09.2013)  
**Britsch, M.:**  
*Overview of LHCb results on CP violation.*
- Lanzhou, China, International Conference on Photonic, Electronic and Atomic Collisions (ICPEAC 2013) (24.07.-30.07.2013)  
**Fischer, D.:**  
*Ion-atom collision dynamics studied with a laser-cooled target.*  
**Krantz, C.:**  
*Absolute rate-coefficients for electron-ion recombination of open-4f-shell tungsten ions from storage ring measurements.*  
**Kreckel, H.**  
*Structure and Stability of Negative Hydrogen Molecules.*  
**Pfeifer, T.:**  
*Two-electron wave-packet observation in Helium studied by XUV time-resolved multi-dimensional spectroscopy.*
- Lanzhou, China, Symposium on Precision with Stored Exotic and Stable Ions (07.11.-10.11.2013)  
**Blaum, K.:**  
*High precision mass measurements for nuclear structure and astrophysics.*
- Les Houches, France, From black holes to cosmic rays: when plasmas go wild"(14.10.-18.10.2013)  
**Kirk, J.G.:**  
*Poynting flux dissipation in relativistic jets.*  
**Völk, H.:**  
*Galactic cosmic rays and the achievement of VHE Astronomy.*
- Les Houches, France, Winter Workshop on Recent QCD Advances at the LHC (13.02.-18.02.2013)  
**Britsch, M.:**  
*Heavy quarks production measurements with the LHCb experiment.*
- Lisbon, Portugal, Nuclear Physics in Astrophysics VI (19.05.-24.05.2013)  
**Lubashevskiy, A.:**  
*The GERDA experiment. Status and results of data taking.*
- London, United Kingdom, Prospects in Neutrino Physics 2013 (19.12.-20.12.2013)  
**Kopp, J.:**  
*Sterile Neutrinos.*
- Madrid, Spain, Theoretical PACT workshop 2013 (07.10.-01.11.2013)  
**Schwingenheuer B.:**  
*New limit on double beta decay of Ge-76 by GERDA and overview over the field.*

- Madrid, Spain, XLIC Meeting (11.11.-13.11.2013)  
**Moshhammer, R.:**  
*Molecules in ultrashort XUV pulses.*
- Mainz, Germany, Patras Workshop on Axions, WIMPs and WISPs (24.06.-28.06.2013)  
**Lindner, M.:**  
*Sterile Neutrino Dark Matter.*  
**Marrodán Undagoitia, T. :**  
*Direct dark matter search with XENON*
- Manhattan, Kansas, USA, ITAMP Workshop "Ultrafast atomic and molecular physics with cutting-edge light sources - New opportunities and challenges" (04.11.-06.11.2013)  
**Pfeifer, T.:**  
*Fundamental quantum dynamics within molecules, atoms, nuclei - and their time-domain control.*
- Marseille, France, XXI International Workshop on Deep-Inelastic Scattering and Related Subjects (22.04.-26.04.2013)  
**Volyanskyy, D.:**  
*Inclusive particle production at LHCb.*
- Maynooth, Ireland, AMIG spring meeting (20.03.-21.03.2013)  
**Dorn, A.:**  
*Novel Studies of Electron-Impact Induced Ionization of Atoms, Molecules and Clusters.*
- Milan, Italy, Italian National Conference on Condensed Matter Physics (09.09.-13.09.2013)  
**Di Piazza, A.:**  
*Laser-plasma interaction as a tool for fundamental physics.*
- Milan, Italy, Workshop The future of neutrino mass measurements „NuMass13“ (04.02.-07.02.2013)  
**Rodejohann, W.:**  
*Neutrinoless Double Beta Decay and Particle Physics.*
- Moscow, Russia, 2<sup>nd</sup> Extreme Universe Laboratory Workshop on Gamma-Ray Bursts (07.10.-11.10.2013)  
**Barkov, M.:**  
*Rapid TeV and GeV Variability in AGNs as Result of Jet-Star Interaction.*
- Moscow, Russia, 41<sup>th</sup> ITEP Winter School of Physics (12.02.-19.02.2013)  
**Akhmedov, E:**  
*Neutrino physics.*
- Moscow, Russia, XVI Lomonosov Conference on Elementary Particle Physics (22.08.-28.08.2013)  
**Akhmedov, E:**  
*Neutrino oscillations and oscillation coherence.*
- München, Germany, Towards the Construction of the Fundamental Theory of Flavour (08.12.-12.12.2013)  
**Lindner, M.:**  
*Sterile neutrinos and Flavour Symmetries.*
- Münster, Germany, Helmholtz Alliance for Astroparticle Physics Dark Matter meeting (18.02.-20.02.2013)  
**Kopp, J.:**  
*Dark Matter Searches at the LHC.*  
**Schwetz-Mangold, T.:**  
*Astrophysics independent bounds on the annual modulation of dark matter signals.*
- Muonio, Finland, Workshop on Extragalactic Gamma-Ray Astronomy with the Cherenkov Telescope Array (18.03.-21.03.2013)  
**Barkov, M.:**  
*Simulations on Relativistic Jets.*  
**Rieger, F.M.:**  
*VHE Emission from AGN and Radio Galaxies.*
- Mürren, Switzerland, Conference on Beam Cooling and Related Topics COOL2013 (10.06.-14.06.2013)  
**Grieser, M.:**  
*Cooling Activities at the TSR Storage Ring.*  
**Krantz, C.:**  
*Heavy Molecular Ions in Electron Cooler Storage Rings.*

- Wolf, A.:**  
*Challenges of Beam Cooling at Low Energy.*  
New London, USA, Gordon Research Conference on Nuclear Chemistry, Colby-Sawyer College (09.06.-14.06.2013)
- Yordanov, D.:**  
*Structure of Exotic Nuclei from a Nuclear-Moments Perspective.*  
Niigata, Japan, FLASY13, Flavor Symmetries and Consequences in Accelerators and Cosmology (01.07.-05.07.2013)
- Holthausen, M.:**  
*CP and Discrete Flavour Symmetries.*  
**Lindner, M.:**  
*Sterile Neutrinos and Flavour Symmetries.*  
**Rodejohann, W.:**  
*Flavor Symmetry Models for Dirac Neutrinos.*
- Nizhny Novgorod, Russia, 5<sup>th</sup> International Conference on "Frontiers of Nonlinear Physics" (FNP 2013) (28.07.-02.08.2013)  
**Gärttner, M.:**  
*Non-linear effects and collectivity in Rydberg EIT-media.*  
**Keitel, C. H.:**  
*Extremely high-intensity laser interactions with fundamental quantum systems.* (plenary talk)  
**Liao, W.-T.:**  
*Coherent control of single x-ray photons & coherent determination of <sup>229</sup>Th isomeric transition.*
- Obergurgl, Austria, Winter school of the Heidelberg Graduate School of Fundamental Physics (19.01.-23.01.2013)  
**Pálffy, A.:**  
*Extending the boundaries of the quantum world.*
- Obertrubach-Bärnfels, Germany, Schule für Astroteilchenphysik 2013 (02.10.-10.10.2013)  
**Kopp, J.:**  
*Neutrino Physics: Established Facts and New Anomalies.*
- Opatija, Croatia, International Conference on the Applications of the Mössbauer Effect (01.09.-06.09.2013)  
**Evers, J.:**  
*X-ray quantum optics with Mössbauer nuclei.*
- Paris, France, "Regards de Physiciens", conference organised by the French Physical Society (01.02.2013)  
**Ascher., P.:**  
*Traque de protons en terre exotique.*
- Paris, France, 2<sup>nd</sup> Workshop on the Physics at the Tandem-Alto Facility, IPN Orsay, (14.05.-15.05.2013)  
**Yordanov, D.:**  
*Spins, Moments, and Radii of <sup>100-130</sup>Cd by High-Resolution Laser Spectroscopy.*
- Paris, France, 4<sup>th</sup> International Conference on Attosecond Physics (08.07.-12.07.2013)  
**Ott, C.:**  
*Two-Electron Wave-Packet Observation in Helium studied by XUV time-resolved multidimensional spectroscopy.*
- Paris, France, CILEX-APOLLON Scientific Advisory Committee meeting (09.04.-10.04.2013)  
**Di Piazza, A.:**  
*High-field physics at APOLLON.*
- Paris, France, International Conference on Dissociative Recombination: Theory, Experiments and Applications, DR2013 (07.07.-12.07.2013)  
**Krantz, C.:**  
*The DR Setup at the Cryogenic Storage Ring.*  
**Kreckel, H.:**  
*Combining experimental techniques for comprehensive astrophysical case studies.*  
**Wolf, A.:**  
*Dissociative Recombination and Electron Collisions of Molecular Ions: Achievements and Challenges.*
- Paris, France, Ion Tech 2 Meeting (24.10.2013)  
**Crespo-López-Urrutia, J.R.:**  
*Cryogenic traps for laser spectroscopy with highly charged ions.*



Paris, France, LaB2013 Workshop (02.12.-04.12.2013)

**Di Piazza, A.:**

*Laser-plasma interaction as a tool for fundamental physics.*

Paris, France, LPNHE, Photon 2013 (20.05.-24.05.2013)

**King, B.:**

*Light-by-light scattering in intense lasers.*

Paris, France, QCD dynamics at the LHC and Super-high energy cosmic rays (14.05.-17.05.2013)

**Blouw, J.:**

*Forward QCD dynamics with the LHCb spectrometer.*

Pescara, Italy, 2013 yearly ICRANet Scientific Meeting on Relativistic Astrophysics (03.06.-19.06.2013)

**Di Piazza, A.:**

*Classical and quantum radiation reaction in intense laser fields.*

*Vacuum polarization effects in strong laser beams.*

*QED processes in strong background electromagnetic fields.*

Pohang, South Korea, Science and R&D towards realizing a free electron laser oscillator (XFEL) (14.02.-15.02.2013)

**Evers, J.:**

*Mößbauer science - x-ray quantum optics with nuclei.*

Poznan, Poland, 9<sup>th</sup> International Workshop on the Application of Lasers and Storage Devices in Atomic Nuclei Research (13.05.-16.05.2013)

**Blaum, K.:**

*New techniques for mass and laser spectroscopy.*

**Eliseev, S.:**

*Penning-trap mass spectrometer PENTATRAP.*

**Eronen, T.:**

*Towards Q-value measurement of tritium.*

**Kreim, S.**

*Nuclear Ground-State Properties by Mass Spectrometry.*

**Nagy, Sz.:**

*Mass spectrometry at TRIGA-TRAP.*

**Sturm, S.:**

*The g-factor of highly charged ions: Test of QED and access to fundamental constants.*

Prague, Czech Republic, 22<sup>nd</sup> International Laser Physics Workshop LPHYS'13 (15.07.-19.07.2013)

**Di Piazza, A.:**

*Stochasticity effects in quantum radiation reaction.*

*Nonlinear double Compton scattering in the ultrarelativistic quantum regime.*

**Evers, J.:**

*Controlling optical response via Fano resonances in atoms and nuclei.*

**Harman, Z.:**

*Laser-generated proton beams for cancer treatment.*

**Hatsagortsyan, K. Z.:**

*Spin effects in relativistic ionization with highly charged ions in super-strong laser fields.*

**Keitel, C. H.:**

*Nuclear and ionic quantum dynamics in high-frequency light fields.*

*Under-the barrier dynamics and spin in very intense laser pulses.*

**Kirk, J.G.:**

*Radiation Reaction and Electron Positron Pair Production in Laser-Electron Beam Collisions.*

**Moshhammer, R.:**

*Electron wave-packets and excited states in strong-field ionization of atoms.*

**Pálffy, A.:**

*Alpha decay and neutron emission in strong laser pulses.*

**Schnorr, K.:**

*Tracing Interatomic Coulombic Decay of Neon Dimers by XUV-pump-XUV-probe Experiments at FLASH.*

**Ullrich, J.:**

*Ultra-fast charge rearrangement and nuclear dynamics in multi-photon inner-shell ionization of molecules.*

Prague, Czech Republic, MEDEX'13 (Matrix Elements for the Double-beta-decay Experiments) (11.06.-14.06.2013)

**Blaum, K.:**

- High-precision nuclear mass measurements for double-beta-transition studies.*  
**Lindner, M.:**  
*Neutrino-less double beta decay as probe of new physics.*
- Protvino, Russia, XXIXth Workshop on High Energy Physics (26.06.-28.06.2013)  
**Lubashevskiy, A.:**  
*Status and results of the GERDA experiment.*
- Quebec City, Canada, DAMOP conference (03.06.-07.06.2013)  
**Sturm, S.:**  
*The g-factor of highly-charged ions and a new electron mass.*
- Quy Nhon, Vietnam, Windows on the Universe, 9<sup>th</sup> Rencontres du Vietnam (11.08.-17.08.2013)  
**Lindner, M.:**  
*Direct Dark Matter Search with XENON.*  
*Implication of observation of a Higgs particle for past, present and future of the Universe.*
- Reggio di Calabria, Italy, International Workshop on Forward Physics at the Large Hadron Collider (15.07.-18.07.2013)  
**Volyanskyy, D.:**  
*Status and prospects for soft QCD studies at LHCb.*
- Rehovot & Eilat, Israel, The International Workshop on low-x Physics (31.05.-04.06.2013)  
**Blouw, J.:**  
*LHCb results from the proton-ion run.*
- Riezlern Austria, workshop of Accelerator and Plasma Physics (10.03.-16.03.2013)  
**von Hahn, R.:**  
*Status of the CSR.*
- Rostock, Germany, XVII. International Conference on Recent Progress in Many-Body Theories (08.09.-13.09.2013)  
**Evers, J.:**  
*Correlations and dissipative dynamics in strongly interacting Rydberg gases.*
- Saas-Fee, Switzerland, ROOT Users Workshop (11.03.-14.03.2013)  
**Voss, H.:**  
*What to expect from TMVA, the Toolkit for Multivariate Analysis.*
- Saclay, France, AtmoHEAD, Atmospheric Monitoring for High-Energy Astroparticle Detectors (10.06.-12.06.2013)  
**Bernlöhr, K.:**  
*Simulation of detector / telescope arrays and the impact of atmospheric parameters.*
- Santiago de Compostela, Spain, CPAN-Meeting (26.11.2013)  
**Blaum, K.:**  
*Nuclear masses and their importance for nuclear structure, nuclear astrophysics and fundamental studies.*
- Schmittgen, Germany, Helmholtz Research School for Quark Matter Studies in Heavy Ion Collisions (10.09.-14.09.2013)  
**Voss, H.:**  
*Statistics.*
- Sexten, Italy, Workshop „GRBs and their Hosts as Tracers of the High Redshift Universe“ (21.01.-25.01.2013)  
**Inoue, S.:**  
*Probing the High-z Universe with the Broadband Emission of GRBs.*
- Snowbird, USA, 43<sup>th</sup> Winter Colloquium on the Physics of Quantum Electronics (06.01.-10.01.2013)  
**Evers, J.:**  
*Quantum coherence and the vacuum. (plenary talk)*  
**Heeg, K. P.:**  
*Spontaneously generated coherence in an ensemble of resonant nuclei.*
- South Hadley, Massachusetts, USA, Quantum Control of Light and Matter – Gordon Research Conferences (28.07.-02.08.2013)  
**Ott, C.:**  
*Impulsive Control of Spectral Line Shapes by the Universal Fano Phase.*
- Stockholm, Sweden, 2<sup>nd</sup> International OKC-DIAS Workshop – Science with H.E.S.S. II (23.-25.10.2013)  
**De los Reyes, R. and Rudak, B.:**  
*Pulsars at VHE: towards H.E.S.S.-II era.*

Stockholm, Sweden, HEP 2013 (17.07.-24.07.2013)

**Buck, C.:**

*The Double Chooz experiment.*

Tehran, Iran, IPM international school and workshop on Particle Physics (IPP13): Flavor physics and dark matter (04.05.-06.05.2013)

**Bozorgnia, N.:**

*Bounds on the dark matter annual modulation signal.*

Tokyo, Japan, International Workshop on Next generation Nucleon Decay and Neutrino Detectors (NNN13), Kavli Institute IPMU (11.11.2013)

**Lindner, M.:**

*Double Beta Decay.*

Tokyo, Japan, Workshop on Physics with Electrostatic Rings (07.02.2013)

**Krantz, C.:**

*The Cryogenic Storage Ring.*

Trento, Italy, ECT workshop on Nuclear Structure and Astrophysical Applications (08.07.-12.07.2013)

**Eronen, T.:**

*Precision mass measurements for fundamental studies.*

Trieste, Italy, Workshop on the Future of Dark Matter Astro-Particle Physics: Insights and Perspectives (08.10.-11.10.2013)

**Viana, A.:**

*Galactic Center view at very-high energy gamma-rays.*

Trieste, Italy, ICTP, Workshop on the Origin of Neutrino Mass: From Majorana to the LHC (02.10.-05.10.2013)

**Fileviez Perez, P.:**

*Neutrinos and the Fate of R-parity in the Superworld.*

Valday, Novgorod region, Russia, The International Workshop on Non-Accelerator New Physics (NANPino-2013) (24.06.-29.06.2013)

**Smolnikov, A.:**

*Ge detectors for GERDA Phase I and Phase II and the first GERDA results.*

Valparaiso, Chile, High energy Physics in the LHC Era (16.12.-20.12.2013)

**Knöpfle K. T.:**

*Results from Phase I of the GERDA experiment and outlook to Phase II.*

Varenna, Italy, Fermi School on Trapped Ions (26.07.2013)

**Blaum, K.:**

*High-precision Penning-trap mass measurements – From the heaviest to the lightest particles.*

Venice, Italy, XV International Workshop on Neutrino Telescopes (11.03.-15.03.2013)

**Kopp, J.:**

*Global Status of Sterile Neutrino Scenarios.*

Victoria, British Columbia, Canada, Celestial, Molecular and Atomic Dynamics (CEMAD) 2013 (29.07.-02.08.2013)

**Pfeifer, T.:**

*Quantum and classical motion of two electrons in atoms and laser fields.*

Villigen, Switzerland, PSI 2013 (11.09.2013)

**Blaum, K.:**

*Precision Penning-trap mass measurements and fundamental constants.*

Warsaw, Poland, Scalars 2013 (12.09.-16.09.2013)

**Lindner, M.:**

*Scale invariance and electro-weak symmetry breaking.*

Warsaw, Poland, 25<sup>th</sup> Annual Conference of the Academia Europaea (16.09.-19.09.2013)

**Kellerbauer, A.:**

*Why Antimatter Matters.*

Xi'an, China, Intense-Field, Short Wavelength Atomic and Molecular Processes 2 (ISWAMP2) (20.07.-22.07.2013)

**Pfeifer, T.:**

*Fundamental Atomic and Molecular Quantum Dynamics in the Time Domain.*

Yerevan, Armenia, International Conference IONS-Armenia (International OSA Network of Students) (11.09.-14.09.2013)

**Hatsagortsyan, K. Z.:**

*Relativistic features of the atomic tunneling ionization in superstrong laser fields.* (plenary talk)

York, UK, University of York: Workshop on "Shape Coexistence Across the Chart of the Nuclides (15.04.-16.04.2013)

**Yordanov, D.:**

*Spins, Moments, and Sizes of  $^{21-32}\text{Mg}$  and  $^{100-130}\text{Cd}$  from Laser Spectroscopy.*

## At Other Institutes

### **Barkov, M.:**

*Rapid TeV and GeV Variability in AGNs as Result of Jet-Star.*  
Munich, Germany, Max-Planck-Institut für Physik (27.06.2013)

### **Belov, N. A.:**

*Pair production processes in exotic atomic systems.*

Heidelberg, Germany, Kirchhoff Institute of Physics, Heidelberg University, Seminar on atomic physics in strong electromagnetic fields (04.02.2013).

*Parity violation effects in the Josephson junction of a p-wave superconductor (UGe<sub>2</sub>).*

Heidelberg, Germany, Kirchhoff Institute of Physics, Heidelberg University, Advanced seminar on solid state physics (29.11.2013)

### **Blaum, K.:**

*100 years of mass spectrometry – Measurements of masses in the past and present.*

LAPP, Annecy (01.02.2013)

*Precision Penning-trap mass measurements and fundamental constants.*

University of Granada (22.03.2013) and

Physikalisch-Chemisches Institut, KIT, Karlsruhe (01.07.2013)

*Fundamental tests of nature with cooled and stored exotic ions.*

Physics Colloquium, Universität Mailand (28.05.2013)

*100 Jahre Massenspektrometrie – Präzisionsmassenmessungen, an exotischen Nukliden früher und heute.*

Universität Bonn (21.06.2013)

*Fundamental tests of nature with cooled and stored exotic ions.*

Université Pierre et Marie Curie, Paris (04.11.2013) and

General Physics Colloquium, University of Aarhus (13.11.2013) and

Universität Aachen (02.12.2013)

### **Casanova, S.:**

*Gamma ray-emission from molecular clouds.*

Institute of Nuclear Physics, Polish Academy of Science, Poland (17.07.2013)

### **Crespo López-Urrutia, J.R.:**

*Precision X-ray wavelength measurements at synchrotrons and free-electron lasers.*

Jena, Germany, Kollaborationsmeeting, Universität Jena (19.04.2013)

*Electron beam ion traps at and from MPIK.*

Vancouver, Canada, ARIEL Meeting, TRIUMF (22.07.2013)

*Highly charged ions in electron beam ion traps.*

Sankt Andreasberg, Germany, Ion Trappers Retreat (24.09.2013)

*Los átomos más calientes del Universo.*

Avilés, Spain, Cámara de Industria, Comercio y Navegación (14.11.2013)

### **Di Piazza, A.:**

*Classical and quantum electrodynamical effects in intense laser fields.*

Berlin, Germany, Max Born Institute, Seminar B: Höchstfeldphysik (08.02.2013) and

Palaiseau, France, Centre de Physique Theorique de l'Ecole Polytechnique, Physics Colloquium (07.11.2013)

### **Dürr, M.:**

*Neutrinosloser Doppel-Betazerfall und Neutrino-Massen.*

Hamburg, Germany, Universität Hamburg (28.01.2013)

### **Eger, P.:**

*News on Supernova Remnants from IACT observations.*

Tübingen, Germany, Annual Meeting of the German Astronomical Society (26.09.2013)

### **Eliseev, S.:**

*Phase-Imaging Ion-Cyclotron-Resonance Technique.*

Seminar at GSI, Darmstadt, Germany (17.12.2013)

### **Evers, J.:**

*Many-body dynamics in strongly interacting Rydberg gases.*

Stuttgart, Germany, University of Stuttgart, SFB Seminar (26.04.2013)

*X-ray quantum optics.*



Fachbereich Physik, Heinrich-Heine-Universität Düsseldorf, Physics Colloquium (05.12.2013) and Heidelberg, Germany, Fakultät für Physik und Astronomie, Heidelberg University, Center for Quantum Dynamics Colloquium (16.10.2013) and Jena, Germany, Friedrich-Schiller-Universität Jena, Kolloquium des Instituts für Optik und Quantenelektronik (12.04.2013) and Leeds, United Kingdom, University of Leeds, Quantum Information Seminar (20.02.2013)  
*Gebändigtes Röntgenlicht: Perspektiven neuartiger kohärenter Lichtquellen.*  
Heidelberg, Germany, 57. Gesprächskreis Rhein Neckar (18.07.2013)

**Fileviez Perez, P.:**

*The Great Desert and New Physics at the LHC.*  
Freiburg University, Germany, (25.06.2013) and Heidelberg University, Germany, Teilchen-Tee (18.05.2013)

**Grieser, M.:**

*25 years close collaboration on accelerator and beam physics with MPIK in Heidelberg.*  
Kyoto University (08.03.2013)  
*The storage rings at MPI for nuclear physics in Heidelberg.*  
NIRS, Chiba (11.03.2013) and Kyoto University (13.03.2013)

**Harman, Z.:**

*Fundamental physics and optical control with highly charged ions from the microwave to the x-ray range.*  
Mainz, Germany, Institut für Physik, Johannes Gutenberg Universität Mainz, Seminar über Quanten-, Atom- und Neutronenphysik (20.06.2013)

**Hatsagortsyan, K. Z.:**

*Under-the-barrier dynamics in laser-induced relativistic tunneling.*  
Heidelberg, Germany, Theoretische Chemie, Physikalisch-Chemisches Institut, Universität Heidelberg, Seminar Theoretische Chemie (03.06.2013)  
*Under-the-barrier dynamics in laser-induced relativistic tunneling: tunneling times and spin effects.*  
Düsseldorf, Germany, Institut für Theoretische Physik I, Heinrich-Heine-Universität Düsseldorf, Seminar über spezielle Probleme der relativistischen Licht-Materie-Wechselwirkung (08.11.2013)

**Heeck, J.:**

*Unbroken Baryon and Lepton Numbers.*  
Dortmund, Germany, Technische Universität, Recent Topics of Particle Theory (05.12.2013)

**Hermann, G.:**

*Den Quellen der kosmischen Strahlung auf der Spur: 10 Jahre Hochenergie-Gammaastronomie mit H.E.S.S.*  
Mannheim, Germany, Hochschule Mannheim, Physikalisches Kolloquium (17.01.2013)

**Hofmann, W.:**

*Die Galaxie in einem neuen Licht: Astronomie mit Gammastrahlen.*  
Heidelberg, Germany, Haus der Astronomie, öffentlicher Abendvortrag (14.02.2013) and Tübingen, Germany (13.06.2013)  
*TeV gamma ray astronomy with H.E.S.S.: The first decade.*  
Hamburg, Germany, DESY, Kolloquium (12.03.2013) and Zeuthen, Germany, DESY Kolloquium (13.03.2013)  
*Teilchenstrahlung aus dem Weltall.*  
Bonn, Germany, Deutsches Museum (18.09.2013)

**Holthausen, M.:**

*Model Building with Discrete Flavour Symmetries.*  
Heidelberg, Germany, Joint Theory Seminar MPIK/ ITP Heidelberg 'Teilchentee', Institut für Theoretische Physik, Universität Heidelberg (07.11.2013) and Lisbon, Portugal, Theory Seminar, Instituto Superior Technico (08.10.2013)  
*CP, Discrete Flavour Symmetries and all that.*  
Basel, Switzerland, Theory Seminar, University of Basel (14.03.2013)  
*CP and Discrete Flavour Symmetries.*  
Southampton, U.K., Friday Seminar, University of Southampton (08.03.2013)

**Keitel, C. H.:**

*Extremely high-intensity laser interactions with fundamental quantum systems.*

Nice, France, International Center for Relativistic Astrophysics Network (ICRA) at the University of Nice Sophia Antipolis, invited lecture at the 2nd Bego Meeting (17.05.2013) and  
Siegen, Germany, Institutskolloquium, Universität Siegen (31.10.2013)

**Kellerbauer, A.:**

*Towards laser cooling of negative ions.*

VERA Seminar, University of Vienna, Austria (16.05.2013)

**Kirk, J.G.:**

*Pair Cascades: Polarization Effects.*

Clarendon Laboratory, University of Oxford (03.04.2013)

*Electron-Positron Pair Creation in Intense Laser Beams.*

Max-Planck-Institut für Plasmaphysik, Greifswald, Institute Colloquium (09.08.2013)

**Kopp, J.:**

*Sterile neutrinos in the laboratory and in cosmology.*

Würzburg, Germany, Universität Würzburg (17.10.2013)

*Flavor Violating Higgs Decays.*

Odense, Denmark, CP3-Origins (24.06.2013) and

Ljubljana, Slovenia, Jozef Stefan Institute (28.03.2013) and

Mainz, Germany, Johannes-Gutenberg-Universität (08.01.2013)

*Hunting for sterile neutrinos in oscillation experiments and in dark matter detectors.*

Trieste, Italy, ICTP (26.03.2013)

*New signals in dark matter detectors.*

München, Germany, Technische Universität München (21.01.2013)

**Kreckel, H.:**

*Astrophysik im Labor: Wie im Weltraum Wasser und andere Moleküle entstehen.*

Öffentlicher Vortrag, Haus der Astronomie, Heidelberg (08.08.2013)

**Kreim, S.:**

*Recent Exploits of the ISOLTRAP Mass Spectrometer.*

Seminar Atomphysik, GSI Darmstadt, Germany (23.04.2013)

*From three-body forces to neutron stars: the role of masses from ISOLTRAP.*

Theorie-Seminar, TU Darmstadt, Germany (25.07.2013)

**Kumar, N.:**

*Future trends in laser-plasma interaction.*

Gwangju, South Korea, South Korea, Institute of Basic Science, Gwangju Institute of Science and Technology, Republic of Korea, Center for Relativistic Laser Science Colloquium (25.07.2013)

*Particle acceleration in plasmas.*

Gwangju, South Korea, South Korea, Institute of Basic Science, Gwangju Institute of Science and Technology, Republic of Korea, Center for Relativistic Laser Science Colloquium (24.07.2013)

**Liao, W.-T.:**

*Coherent control of nuclei and x-rays.*

Garching, Germany, Max-Planck-Institut für Quantenoptik (MPQ), Theory Seminar (18.09.2013)

*The Iron Cage for Single X-Ray Photons & The Quantum Trump to the Hidden Nuclear Clock transition.*

Hsinchu, Taiwan, Department of Physics at National Tsing Hua University, Atomic, Molecular and Optical Physics Seminar (25.02.2013)

**Lindner, M.:**

*Neue Ergebnisse aus der Neutrinophysik.*

Mainz, Germany, Kolloquium an der Universität Mainz (19.11.2013)

*Results on neutrinoless double beta decay from GERDA phase I.*

Genf, Switzerland, CERN, EP-Colloquium (01.10.2013) and

Heidelberg, Germany, Teilchenkolloquium der Universität HD (23.07.2013)

*Faszination Astronomie - Dunkle Materie.*

Mainz, Germany, Medizinische Gesellschaft (08.05.2013)

*Neutrinos as Probes of new Physics.*

Jena, Germany, Universität, Kolloquium (22.04.2013)

*Wo steckt die Dunkle Materie?*

Paderborn, Germany, Nixdorf Museum (24.01.2013)

**Lu, C.-C.:**

*The blind and the Galaxy: Highlights of H.E.S.S. Observations of the Galactic plane.*

Taipei, Taiwan, LeCosPa Center Cosmology Seminar (19.08.2013)

*The non-thermal Milky Way.*

HsinChu, Taiwan, National Tsing Hua University, Astronomical Colloquium (30.08.2013)

**Mackenroth, K. F.:**

*Quantum radiation from electrons in ultrashort, intense laser pulses.*

Graz, Austria, Karl-Franzens-Universität Graz, Special Workshop (11.09.2013)

**Marrodán Undagoitia, T. :**

*Wie kann man Dunkle Materie direkt nachweisen?*

Heidelberg, Germany, Gesprächskreis Rhein-Neckar (31.01.2013)

**Mochol, I.:**

*Magnetically dominated outflows and the role of nonlinear waves.*

Amsterdam, The Netherlands, seminar at Anton Pannekoek Astronomical Institute (12.07.2013)

**Moshhammer, R.:**

*Time-resolved experiments with atoms and molecules using XUV and IR laser pulses.*

Heidelberg, Germany, Seminar AG Motzkus, Universität Heidelberg (13.06.2013) and

Hamburg, Germany, Photon science colloquium, CFEL at DESY (17.05.2013)

*Atomare und chemische Reaktionen in Superzeitleupe: Experimente mit ultrakurzen Laserpulsen.*

Mannheim, Germany, Physikalisches Kolloquium, Hochschule Mannheim (11.04.2013)

**Ott, C.:**

*Time-Resolved Spectroscopy – Techniques & Applications.*

Salzhausen, Haus Schnede, Germany, Klausurwoche Morgner/Kovačev (02.09.-06.09.2013)

**Pálffy, A.:**

*Nuclear excitation of  $^{229m}\text{Th}$  with Alpha-X.*

Glasgow, United Kingdom, University of Strathclyde, Physics Seminar (30.08.2013)

*Theoretical uncertainties for Auger electron cascades.*

Vienna, Austria, International Atomic Energy Agency IAEA, Consultants' Meeting "Auger emission data needs for medical applications" (09.05.2013)

**Pfeifer, T.:**

*Multidimensional XUV spectroscopy of 2-electron dynamics and Fano-phase control.*

Hamburg, Germany, DESY Photon Science Colloquium (05.07.2013)

*Time-Resolved Spectroscopy and Control of Few- and Multi-electron Dynamics, Using Attosecond Pulses and Free-Electron Lasers (FELs).*

Frankfurt, Germany, Physikalisches Kolloquium, Universität Frankfurt (30.01.2013)

*Asking two excited electrons the ultra-quick questions: "What is absorption" and "What is a Fano resonance" — in the time domain...?*

Dresden, Germany, Seminar: International Max-Planck Research School (IMPRS) of Dynamical Processes, Max-Planck Institute for the Physics of Complex Systems (13.11.2013)

*Listening to the ultrafast talk of two excited electrons — And asking them Physics questions.*

Freiburg, Germany, Physikalisches Kolloquium, Universität Freiburg (28.10.2013) and

Heidelberg, Germany, Physikalisches Kolloquium, Universität Heidelberg (25.10.2013)

**Rieger, F.M.:**

*High Energy Emission from Radio Galaxies.*

Zeuthen, Germany, DESY (15.03.2013)

**Rodejohann, W.:**

*Neutrinoless Double Beta Decay and Particle Physics.*

Würzburg, Germany, Universität Würzburg (19.02.2013)

*Sterile Neutrinos from low energy to the GUT scale.*

Aachen, Germany RWTH Aachen (10.01.2013)

**Sanchez, D.:**

*GeV-TeV Observations of the most energetic blazars.*

Montpellier, France, LUPM, Université de Montpellier (29.01.2013)

**Schmelling, M.:**

*Physics Highlights from the LHCb Experiment.*

Hamburg, Germany, DESY (16.04.2013) and

Zeuthen, Germany, DESY (17.04.2013)

**Schwetz-Mangold, T.:**

*The Decade of the WIMP.*

Aachen, Germany, RWTH Aachen (07.05.2013)

*Dark Matter direct detection: phenomenology, status, and astrophysics-independent methods.*

Orsay, France, Laboratoire Physique Theorique (LPT) (28.03.2013)

*Astrophysics-insensitive methods for Dark Matter direct detection.*

Montpellier, France, Univ. Montpellier (07.02.2013)

*Sterile neutrinos at the eV-scale?*

Orsay, France, Laboratoire de l'Accelérateur Lineaire (LAL) (05.02.2013)

**Senftleben, A.:**

*Two aspects of molecular autoionization: Neon dimer and hydrogen.*

Kassel, Germany, Forschungsseminar ULTRA, Universität Kassel (04.07.2013)

*Imaging molecular dynamics by coincidence measurements with XUV radiation.*

Aarhus, Denmark, AMO Seminar, University of Aarhus (14.01.2013)

**Voitkiv, A.B.:**

*Transfer ionization in fast ion-atomic collisions.*

Lanzhou, China, Institute of Modern Physics (14.08.2013)

**von Hahn, R.:**

*The Accelerator Facility at MPIK - past and future.*

TRIUMF, Vancouver, Canada, (22.07.2013)

**Weidenmüller, H.-A.:**

*Naturwissenschaften und Theologie.*

Vienna, Austria, Kardinal-König Vorlesung, Universität Wien (gemeinsam mit Prof. C. Marksches, Humboldt-Universität Berlin) (03.06.2013)

*Zufallsmatrizen in der Physik.*

Dresden, Germany, Physikalisches Kolloquium der TU (18.06.2013)

# Habilitations, Dissertations and Theses 2011

## Habilitations

Litvinov, Y. A. (2011). Beta-decay of highly-charged ions. Habilitation Thesis, Ruprecht-Karls-Universität, Heidelberg.

## Dissertations

- Aberle, C. (2011). Optimization, simulation and analysis of the scintillation signals in the Double Chooz experiment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Arka, I. (2011). Non-Linear Waves in the Laboratory and in Astrophysics: Pair Production in Counter-Propagating Laser Beams and Strong Waves in Pulsar Winds. PhD Thesis, Ruprecht-Karls Universität, Heidelberg, Germany.
- Berg, M. H. (2011). The visible rovibrational spectrum of the triatomic hydrogen ion via high-sensitive chemical reaction spectroscopy in a cryogenic ion trap. PhD Thesis, Universität Köln, Köln.
- Bochow, A. (2011). A systematic study of Supernova Remnants as seen with H.E.S.S. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Chaves, R. C. G. (2011). The extended H.E.S.S. Galactic Plane survey: Discovering and identifying new sources of VHE  $\gamma$ -rays. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Deil, C. (2011). HESS and Fermi surveys of the galactic gamma-ray source population. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Diehl, C. (2011). First mass measurements with the MPIK/UW-PTMS. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Ebadi, H. (2011). Stabilization and interference in high-frequency laser driven atoms. PhD Thesis, Ruprecht-Karls Universität, Heidelberg, Germany.
- Heisel, M. (2011). LArGe: A liquid argon scintillation veto for Gerda. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Hu, H. (2011). Multi-photon creation and single-photon annihilation of electron-positron pairs. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Kohler, M. C. (2011). Frontiers of High-Harmonic Generation. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Krishnan, S. R. (2011). Doped Helium Nanodroplets in Intense Few-Cycle Infrared Pulses. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Kurka, M. (2011). Zwei-Photonen-Doppelionisation von Helium und  $D_2$ -Molekülen am Freie-Elektronen-Laser in Hamburg. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Langbrandtner, C. (2011). Background, Sensitivity and Directionality Studies for the Double Chooz Experiment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Laux, F. (2011). Entwicklung von kapazitiven Positions-, Strom- und Schottkysignal-Messsystemen für den kryogenen Speicherring CSR. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Lompe, T. (2011). Efimov Physics in a three-component Fermi gas. PhD Thesis, Ruprecht-Karls Universität, Heidelberg, Germany.
- Maneschg, W. (2011). Low-energy solar neutrino spectroscopy with Borexino: Towards the detection of the solar pep and CNO neutrino flux. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schabinger, B. (2011). Ein Experiment zur Bestimmung des g-Faktors des gebundenen Elektrons in wasserstoff- und lithiumähnlichen mittelschweren Ionen. PhD Thesis, Johannes Gutenberg-Universität, Mainz.
- Schmid, S. I. (2011). Quantum optics with whispering gallery resonators coupled to atoms and fibers. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schuh, M. (2011). Study of Higher Order Modes in Superconducting Accelerating Structures for Linac Applications. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Serwane, F. (2011). Deterministic preparation of a tunable few-fermion system. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Stützel, J. (2011). Fragmentation of Small Multi-Electron Molecular Ions in Cold Electron Collisions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.



- Ubieto Diaz, M. (2011). Off-line commissioning of a non-destructive FT-ICR detection system for monitoring the ion concentration in the KATRIN beamline. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Ulmer, S. (2011). First Observation of Spin Flips with a Single Proton Stored in a Cryogenic Penning Trap. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.

## Diploma, Master and Bachelor Theses 2011

- Ballance, T. (2011). Commissioning of a cryogenic Paul trap for highly charged ions. Master Thesis, Blackett Laboratory, Imperial College, London.
- Berg, F. A. (2011). Die Ionenoptik der Injektionsstrahlführungslinien des kryogenen Speicherrings CSR. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Blumenthal, F. (2011). Stability analysis of a real space split operator method for the Klein-Gordon equation. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Darvasi, G. (2011). Optical Control of X-Ray Lasing. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Ding, T. (2011). Modellatom mit zwei Elektronen in jeweils einer Raumdimension in Wechselwirkung mit XUV- und IR-Laserfeldern. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Dörr, A. (2011). Setup, test and optimization of detection electronics for high-precision mass measurements at PENTATRAP. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Dornes, C. (2011). 3D-focusing Spectrometer for a Reaction Microscope. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Eberle, S. (2011). Construction of an electron impact ion source for test measurements on a linear Paul trap. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Friedrich, O. (2011). Transparente Randbedingungen in der relativistischen Quantenmechanik. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gamer, L. (2011). Noise measurements of the GERDA preamplifier. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Geist, J. (2011). Characterization of Junction Gate Field-Effect Transistors at Room Temperature and 77K. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Globig, D. (2011). A Laser Cooled Lithium Beam Source for the Loading of a Magneto-Optical Trap in a Reaction Microscope. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Grussie, F. (2011). Optimierung der laserinduzierten Reaktionsspektroskopie von  $H^+_3$ -Ionen in einer kryogenen Ionenfalle. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Hagstotz, S. (2011). Simulation von Elektronendynamik in autoionisierenden Heliumniveaus unter dem Einfluss ultrakurzer Laserpulse. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Heeck, J. (2011). Phenomenology of a Gauged  $L_\mu - L_\tau$ -Symmetry. Diploma Thesis, Ruprecht-Karls-Universität Heidelberg, Heidelberg, Germany.
- Heeg, K. P. (2011). Models for correlated Rydberg gases. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Hehn, N. (2011). Simulation des axialen Detektionssystems von THE-Trap. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Heimel, H. (2011). EUV-Spektroskopie mittlerer Ionisationszustände von Eisen und Silizium. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Helmrich, S. (2011). Nuclear Excitation by Electron Capture in Stellar Environments. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Junker, A. (2011). Coherent Control of Nuclear Excited State Population Using X-ray Free Electron Lasers. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Kechler, A. (2011). Untersuchungen zur Massenauflösung in einer elektrostatischen Falle für schnelle Ionenstrahlen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Krupp, A. (2011). Untersuchung der Pulsdauer und Langzeitstabilisierung eines Hohlfaserkompressors. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Laux, M. (2011). Construction and characterization of a new Reaction Microscope. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.

- Liluashvili, A. (2011). Sterile Neutrinos. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Lim, K. S. (2011). Planck Scale Boundary Conditions And The Standard Model. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Lommen, J. (2011). Reference Masses for Precision Mass Spectrometry. Design and Implementation of a Pierce Geometry to the Cluster Ion Source at ISOLTRAP. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Oster, F. (2011). Generation of Correlated Photon Pairs in a Quantum System with Broken Inversion Symmetry. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Otto, K. A. (2011). Calibration of the Position Sensitive Beam Monitor of the Heidelberg Dust Accelerator. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Philipp, R. (2011). Untersuchung der Pulsdauer durch Autokorrelation und Überprüfung der Pulsdauer in einem Reaktionsmikroskop. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Rauch, L. (2011). Detection of  $^{133}\text{Xe}$  in the upper troposphere over Germany released by the nuclear power plant Fukushima Daiichi. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Reichegger, A. J. (2011). Neutrinooszillationen: Formalismus und Resultate. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Resetar, A. (2011). Das Standardmodell der Teilchenphysik. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Rischka, A. (2011). Aufbau und Charakterisierung eines Systems zur Stabilisierung des Magnetfeldes an PENTATRAP. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Rupp, N. (2011). Energiekalibrierung mit dem radioaktiven Isotop  $^{12}\text{B}$  beim Double Chooz Antineutrinoexperiment. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schick, J. (2011). Entwicklung eines Versuchsaufbaus zur Adsorptionsmessung von Radon an Aktivkohle. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schmid, G. (2011). Charakterisierung eines Iod-Überschallgasjets für ein Reaktionsmikroskop am Freie-Elektronen-Laser in Hamburg. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schnorr, K. (2011). Laserspektroskopie hochgeladener Ionen an einer EBIT. Diploma Thesis, Justus-Liebig-Universität, Gießen.
- Schönleber, D. W. (2011). Theory of Neutrino Oscillations in the Framework of Quantum Mechanics. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schuh, M. (2011). Simulation von elektrostatischen Eigenschaften der THE-Trap Penningfalle. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Stasinopoulos, I. (2011). Hyperfine optical resonance fluorescence spectrum of titaniumlike ions. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Straße, T. (2011). Generating a Spread Out Bragg Peak to Investigate the Relative Biological Effectiveness (RBE) of Antiprotons. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Tapia Oregui, B. (2011). Kosmologie und primordiale Nukleosynthese. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Tremer, M. (2011). Untersuchung und Optimierung des externen Ladens von Ionen bei THE-Trap. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Weigel, A. (2011). Aufbau und Charakterisierung von Axialfrequenzverstärkern für das PENTATRAP-Experiment. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Wilhelm, A. (2011). Neutrino oscillations in non-uniform matter in quantum field theory framework. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Wörner, D. (2011). Nichtlokale Anfangszustände und Korrelationen beim Anregungstransport im FMO Komplex. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Wolf, T. M. (2011). Neutrinomassen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.

# Dissertations and Theses 2012

## Dissertations

- Ahrens, S. (2012). Investigation of the Kapitza-Dirac effect in the relativistic regime. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Artikova, S. (2012). Low-Energy Ions in the Heavy Ion Cooler Storage Ring TSR. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Baumann, T. M. (2012). Spektroskopische Untersuchungen resonanter Rekombinationsprozesse an hochgeladenem Silizium in einer Elektronenstrahl-Ionenfalle. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Beilmann, C. (2012). Über die Stärke mehrelektronischer Resonanzen bei der Photorekombination und -ionisation. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Borgmann, C. (2012). Mass Measurements of Exotic Ions in the Heavy Mass Region for Nuclear Structure Studies at ISOLTRAP. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Castañeda Cortés, H. M. (2012). Laser assisted  $\alpha$  decay. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Dadi, A. (2012). Nuclear processes in intense light-matter interaction. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Domesle, C. (2012). Momentum Imaging of Photofragments and Photoelectrons using Fast Ion Beams. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Fellenberger, F. (2012). Aufbau und Charakterisierung der ersten Ecke des kryogenen elektrostatischen Speicherrings CSR. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Galow, B. J. (2012). Laser-generated Ion Beams for Medical Applications. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Holthausen, M. (2012). Towards Testable Theories with Discrete Flavour Symmetries. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Junginger, T. (2012). Investigations of the surface resistance of superconducting materials. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Lefa, E. (2012). Non-thermal Radiation Processes in Relativistic Outflows from AGN. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Lennarz, D. (2012). A Study of Transient Very-High-Energy Gamma-Ray Emission from Gamma-Ray Bursts and Supernovae with H.E.S.S. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Mackenroth, K. F. (2012). Quantum radiation in ultra-intense laser pulses. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Mochol, I. (2012). Nonlinear waves in Poynting-flux dominated outflows. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Odrowski, S. (2012). High-Energy Neutrino Scan of the Galactic Plane. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Ott, C. R. (2012). Attosecond multidimensional interferometry of single and two correlated electrons in atoms. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Pflüger, T. (2012). Electron Impact Ionization Studies of Small Rare Gas Clusters. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Raith, P. N. (2012). Few-cycle multidimensional laser control of attosecond pulse generation. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Repp, J. (2012). The setup of the high-precision Penning trap mass spectrometer PENTATRAP and first production studies of highly charged ions. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Rietz, H. (2012). Attosekundenphysik mit dem Reaktionsmikroskop: Eine Konzeptstudie, erste Experimente und mögliche Anwendungen. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Roux, C.-E. (2012). High-Resolution Mass Spectrometry: The Trap Design and Detection System of Pentatrap and New Q-Values for Neutrino Studies. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Rudek, B. (2012). Multiple ionization of heavy atoms by intense x-ray free-electron laser pulses. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

- Schneider, K. E. (2012). Dynamics in charge transfer and ionization processes in fast ion-helium collisions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Schuricke, M. (2012). Two and Three Photon Double Ionization of Lithium. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Schwarz, M. (2012). Lasermanipulation von rotationsgekühlten Molekülionen in einer neuen kryogenen Paul-Falle. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Shornikov, A. (2012). An electron cooler for ultra-low energy cryogenic operation. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Shubina, D. (2012). Schottky mass measurements of heavy neutron-rich nuclides in the element range  $70 \leq Z \leq 79$  at the ESR. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Simon, V. V. (2012). Penning-trap mass spectrometry of radioactive, highly charged ions with TITAN: Measurements of neutron-rich Rb and Sr nuclides for nuclear astrophysics and the development of a novel Penning trap for cooling highly charged ions. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Smorra, C. (2012). High-precision Q-value and mass measurements for neutrino physics with TRIGA-TRAP and commissioning of an on-line ion source for TRIGA-SPEC. PhD Thesis, Ruprecht-Karls Universität, Heidelberg.
- Sterken, V. J. (2012). Filtering of interstellar dust in the heliosphere. PhD Thesis, Technische Universität Carolo-Wilhelmina, Braunschweig.
- Sturm, S. (2012). The g-factor of the electron bound in  $^{28}\text{Si}^{13+}$ : The most stringent test of bound-state quantum electrodynamics. PhD Thesis, Johannes-Gutenberg Universität, Mainz.

## Diploma, Master and Bachelor Theses 2012

- Beckerle, K. (2012). Ionization of Osmium in a Stellar Plasma under s-Process Conditions. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Bieling, S. (2012). Investigations of rotational heating sources in the cryogenic linear Paul trap CryPTEx with trapped molecular  $\text{MgH}^+$  ions. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Bogda, C. (2012). Simulation zweier ultrakalter wechselwirkender Lithiumatome in einer eindimensionalen optischen Dipolfalle. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Bohn, J. E. (2012). Towards an ultracold three-component Fermi Gas in a two-dimensional optical lattice. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Broska, A. (2012). Koinzidenter Nachweis von Elektronen und Xenonionen am Freie-Elektronen-Laser in Hamburg. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Buchauer, L. (2012). Konstruktion einer kompakten Elektronenstrahl-Ionenfalle mit Permanentmagneten für Fluoreszenzmessungen. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Cörlin, P. (2012). Laser induced Coulomb-explosion of allene molecules: Experiment and simulation. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Georgi, S. (2012). Röntenspektroskopie mit einem magnetischen Mikrokalorimeter an hochgeladenen Eisen- und Wolframionen. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gläßle, T. (2012). Spectrum guided integration for nonrelativistic quantum-mechanical problems. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Golzke, H. (2012). Accuracy determination of the KATRIN FT-ICR mass spectrometers using  $^6\text{Li}$  and  $^7\text{Li}$ . Diploma Thesis, Karlsruher Institut für Technologie, Karlsruhe.
- Grothaus, P. (2012). Das Zusammenspiel zwischen Natürlichkeit und direktem Nachweis von Neutralinos als Dunkle Materie. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Har-Shemesh, O. (2012). Peak intensity measurement of strong laser pulses using nonlinear Thomson scattering. Master Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Hollain, D. (2012). Reproduzierbarkeitsstudie zur Bestimmung der Wellenlänge der  $^2\text{S}_{1/2} - ^2\text{P}_{1/2, 3/2}$  Übergänge des Li-artigen Eisenions. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Huth, L. (2012). Charakterisierung der Double Chooz-Photomultiplier. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Klein, F. (2012). Comparison of classical and quantum mechanical dynamics in ionisation processes in strong laser fields. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.

- Kolb, M. (2012). Flavour Symmetries and Models of Neutrino Mixing. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Marx, R. (2012). Event correlation analysis of the Galactic Centre region. Master Thesis, Université Pierre et Marie Curie, Paris, France.
- Memenga, N. (2012). A neutrinophilic two Higgs doublet model with an  $A_4$  flavour symmetry for Dirac neutrinos. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Michaels, L. (2012). Phenomenology of Sterile Neutrinos at different Scales. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Mitrouskas, D. (2012). Quantum Effects in the Generation of the Matter Anti-Matter Asymmetry. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Prieß, M. (2012). Aufbau und Test eines Pulsformers für Femtosekunden-Lichtpulse. Master Thesis, Ruprecht-Karls-Universität, Heidelberg, Germany.
- Schüßler, R. (2012). Aufbau und Charakterisierung eines optischen Systems für Zweidimensionale Spektroskopie. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Stark, J. (2012). Untersuchung von KLL dielektronischer Rekombination an hochgeladenen  $\text{Si}^{6+}$  bis  $\text{Si}^{12+}$  Silizium-Ionen mit einer Elektronenstrahl-Ionenfalle. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Stolzenburg, D. (2012). Charakterisierung von Plastikszintillatoren für das Myonveto eines neuen Gamma-Spektrometers (GIOVE). Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Stooss, V. (2012). Laser coupling of singly excited states in atomic Helium on the attosecond timescale. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.



# Dissertations and Theses 2013

## Dissertations

- Barry, J. (2013). New physics models with sterile neutrinos at different energy scales. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Bernitt, S. (2013). Resonante Anregung astrophysikalischer Röntgen-Übergänge in hochgeladenen Eisenionen mit dem Freie-Elektronen-Laser LCLS. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Camus, N. (2013). Non-sequential double ionization of atoms with phase-controlled ultra-short laser pulses. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Cavaletto, S. (2013). Quantum control of x-ray spectra. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Dück, A. (2013). Phenomenology of Neutrinos and Possible SO(10) Origins of Fermion Masses and Mixings. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Dürr, M. (2013). Phenomenological Aspects of Theories for Baryon and Lepton Number Violation. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Eibach, M. (2013). High-precision mass measurements in the realm of the deformed shell closure N=152. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Erk, B. (2013). Fragmentation Dynamics of Small Molecules upon Multiple Ionization by X-Ray Free-Electron Laser Pulses. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Frossard, T. (2013). First principles approach to leptogenesis. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gärttner, M. (2013). Many-Body Effects in Rydberg Gases: Coherent Dynamics of Strongly Interacting Two-Level Atoms and Nonlinear Optical Response of a Rydberg Gas in EIT Configuration. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gulfam, Q.-u.-A. (2013). Creation, applications and detection of entanglement in quantum optical systems. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Heck, M. (2013). Investigation of various excitation and detection schemes of stored ions in a Penning trap. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Hubele, R. (2013). Kinematisch vollständige und zustands-selektive Untersuchung der stoßinduzierten Einfachionisation von Lithium. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Kafexhiu, E. (2013). Radiation signatures of nuclear reactions in very hot astrophysical plasmas. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Kreim, K. D. (2013). Collinear Laser Spectroscopy of Potassium: Nuclear Charge Radii beyond N = 28. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Liao, W.-T. (2013). Coherent Control of Nuclei and X-Rays. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Lindemann, S. (2013). Intrinsic <sup>85</sup>Kr and <sup>222</sup>Rn Backgrounds in the XENON Dark Matter Search. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Lu, C.-C. (2013). An advanced direction reconstruction technique and application to the observation with H.E.S.S. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Menk, S. (2013). Vibrational Auto-Detachment of the Sulfur Hexafluoride Anion in a Low-background Cryogenic Ion Beam Trap. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Müller, S. (2013). Electroweak Processes in Laser-Boosted Lepton Collisions. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Popov, D. (2013). Development of the Monte Carlo event generator tuning software package Lagrange and its application to tune the PYTHIA model to the LHCb data. PhD Thesis, Universität Dortmund, Dortmund.
- Prosekin, A. (2013). Propagation and radiation of ultrarelativistic particles in magnetic fields in different astrophysical environments. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Rudolph, J. K. (2013). Fluoreszenzspektroskopie an K-Schalen-Übergängen hochgeladener Eisenionen. PhD Thesis, Justus-Liebig-Universität, Gießen.
- Schmidt, D. (2013). Novel Frameworks for Dark Matter and Neutrino Masses. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Sellner, S. (2013). Simulations, Optimizations and Microdosimetric Measurements of Beam Quality for Heavy-Ion Tumor Therapy. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

- Sperl, A. G. (2013). XUV-IR pump-probe experiments: exploring nuclear and electronic correlated quantum dynamics in the hydrogen molecule. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Tegami, S. (2013). LET measurements with a Liquid Ionization Chamber. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Wagner, A., & Blaum, K. (2013). The g-factor of the valence electron bound in lithiumlike silicon  $^{28}\text{Si}^{11+}$ : The most stringent test of relativistic many-electron calculations in a magnetic field. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Weber, M. (2013). Gentle Neutron Signals and Noble Background in the XENON100 Dark Matter Search Experiment. PhD Thesis, Ruprecht-Karls-Universität, Heidelberg.

## Diploma, Master and Bachelor Theses 2013

- Bayha, L. (2013). Atomic potential corrections to electron motion in strong laser fields. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Bleher, M. (2013). Neutrinoloser Doppelbeta-Zerfall: Untersuchung einer Methode zur Auswahl eines Nuklearen Matrix-Elements. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Brühl, E. (2013). Photon and Electron Impact Ionization of Lithium studied with a MOTReMi. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Bücking, T. M. (2013). An Off-Axis Electron Gun for a Compact Electron Beam Ion Trap. Master Thesis, Imperial College, Blackett Laboratory, London, UK.
- Cichon, D. (2013). Examining Hamamatsu R11410-21 photomultipliers for XENON1T at room and liquid Xenon temperatures. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Ding, T. (2013). Time-resolved spectroscopy of autoionizing states in few-electron systems. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Ding, T. (2013). Time-resolved spectroscopy of autoionizing states in few-electron systems. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Eberle, S. (2013). Photoionization of the Beryllium atom. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Gernandt, P. S. (2013). Neutrinos und Leptonflavor-Verletzung. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Held, M. (2013). Numerische Simulation der Symmetriebrechung bei Elektronen-Emission durch ultrakurze ein- und zweifarbige Laserpulse. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Hökel-Schmöger, C. D. (2013). Realisierung des axialen Feedbacks bei PENTATRAP. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Humbert, P. (2013). Nicht-minimale Varianten des Seesaw-Mechanismus als Erweiterung des Standardmodells. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Klaus, H. (2013). Design and Characterization of a Polyphase-Filter Phaseshifter for THE-Trap. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Krupp, A. (2013). Two-color pump-probe experiments on single and double ionization of noble gas atoms in strong laser fields. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Kunz, J. (2013). Analysis of Time Delays in Photoionization of  $\text{N}_2$  in XUV-THz Pump-Probe Experiments at FLASH. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Mashni, L. (2013). Untersuchung resonanter Photorekombination hochgeladenen Eisens in einer Elektronenstrahlionenfalle. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Neff, J. (2013). Optimierung der Form von fs Laserpulsen mit Hilfe eines Pulsformers. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Piest, B. (2013). Charakterisierung des Ionenstrahls der Hyper-EBIT. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Reichegger, A. (2013). Temporal dynamics of stimulated emission. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Scala, D. (2013). Radiative Symmetriebrechung in Links-Rechts Symmetrischen Modellen mit einer Shiftsymmetrie an der Planckskala. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.
- Schmid, G. (2013). XUV-Pump THz-Probe Experiments on Neon at the Free-Electron Laser in Hamburg. Master Thesis,

Ruprecht-Karls-Universität, Heidelberg.

Schmidt, S. (2013). Neutrino Mass Generation in Conformally Invariant Theories. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schmöger, L. (2013). Ein elektrodynamisches System für den Transfer hochgeladener Ionen in eine Paulfalle. Diploma Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schönleber, D. W. (2013). Dissipative Dynamics in Many-Body Rydberg Systems. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schupp, R. (2013). Spektroskopische Untersuchungen von  $\text{Ir}^{17+}$ . Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Schwierk, A. (2013). Ratenbestimmung bei der Zwei-Photonen-Ionisierung des Berylliumatoms. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Stemmler, S. (2013). Untersuchung der Adsorption von Radon und Xenon an verschiedenen Adsorbensien. Bachelor Thesis, Ruprecht-Karls-Universität, Heidelberg.

Welter, J. M. R. (2013). Oscillation phenomenology of gauged sterile neutrinos. Master Thesis, Ruprecht-Karls-Universität, Heidelberg.

# Lectures and Courses at Universities

## Summer Semester 2011

**Aharonian, F.A.:**

*Highest Energy Cosmic Rays and Intergalactic Magnetic Fields.*  
IRAP PhD Erasmus Mundus School, Nice, France

**Blaum, K., Wolf, A.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Blaum, K.:**

*Vorlesung: Applications of traps and storage rings.*  
Universität Heidelberg

**Buck, C., Simgen, H., Rodejohann, W.:**

*Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.*  
Universität Heidelberg

**Di Piazza, A.:**

*Tutorial: Exercise group for Experimental Physics II.*  
Universität Heidelberg

**Dorn, A.:**

*Oberassistent zur Übung Experimentalphysik IV (PEP4).*  
Universität Heidelberg

**Evers, J.:**

*Lecture: Coherent x-ray optics.*  
Universität Heidelberg

**Fischer, D.:**

*Übungen zur Vorlesung Experimentalphysik IV.*  
Universität Heidelberg

**Keitel, C. H., Di Piazza, A.:**

*Oberseminar: Theoretische Quantendynamik.*  
Universität Heidelberg

**Kirk, J.G.:**

*Sources of High Energy Radiation.*  
Universität Heidelberg  
*Particle Acceleration.*  
Summer School, Schloss Weesenstein, Dresden (22.08.-28.08.2011)

**Lindner, M.:**

*Neutrinos and Dark Matter as Probes of new Physics.*  
Universität Dresden

**Litvinov, Y., Wolf, A.:**

*Applications of Traps and Storage Rings.*  
Universität Heidelberg

**Moshammer, R.:**

*Übungen zur Experimentalphysik IV (PEP4).*  
Universität Heidelberg

**Müller, C.:**

*Lecture: Fundamentale Wechselwirkungsprozesse zwischen Elektronen und Photonen.*  
Universität Heidelberg  
*Compact Course: Anwendungen der Gruppentheorie in der Physik.*  
Universität Heidelberg, Studierendentage (04.04.-08.04.2011)

**Pfeifer, T., Quint, W., Moshhammer, R., Blaum, K.:**

*Bachelorseminar: "Modern Experiments in Special and General Relativity".*

Universität Heidelberg

**Pfeifer, T.:**

*Oberseminar: "Attosecond Physics and Quantum Control with Intense Laser Fields".*

Universität Heidelberg, MPIK

*Übungen zur Experimentalphysik IV (PEP4).*

Universität Heidelberg

**Rieger, F.M.:**

*Astrophysics "Lecture on Radio Galaxies".*

Dublin Summer School on High Energy Astrophysics, Dublin Ireland

**Schwetz-Mangold, T.:**

*Dunkle Materie.*

Universität Heidelberg

*Dark Matter Phenomenology.*

ISAPP 2011 school, MPIK, Heidelberg, Germany (08.07.-15.07.2011)

*Neutrino Theory.*

Graduate Day, Kepler Center for Astro and Particle Physics, Universität Tübingen (13.05.2011)

**Wolf, A.:**

*Übungen zur Experimentalphysik IV (PEP4).*

Universität Heidelberg



## Winter Semester 2011/2012

**Aharonian, F.A.:**

*Cosmology with gamma-rays from AGN.*  
IRAP PhD Erasmus Mundus School, Nice, France

**Blaum, K., Wolf, A.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Buck, C., Simgen, H., Rodejohann, W.:**

*Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.*  
Universität Heidelberg

**Crespo López-Urrutia, J.R.:**

*Advanced Atomic, Molecular, and Optical Physics (AAMOP).*  
Universität Heidelberg  
*Übungen zu Advanced Atomic, Molecular, and Optical Physics.*  
Universität Heidelberg

**Di Piazza, A.:**

*Lecture: Renormalization theory in Quantum Electrodynamics.*  
Universität Heidelberg

**Evers, J., Oberthaler, M.:**

*Lecture: Quantum optics: theory and experiment.*  
Universität Heidelberg

**Feuerstein, B.:**

*Übungen zur Experimentalphysik III (Koordination).*  
Universität Heidelberg

**Fischer, D.:**

*Übungen zur Vorlesung Experimentalphysik III.*  
Universität Heidelberg

**Keitel, C. H., Harman, Z.:**

*Oberseminar: Theoretische Quantendynamik*  
Universität Heidelberg

**Kellerbauer, A., Lange, M., Litvinov, Y., Wolf, A.:**

*Seminar on Stored Ion Physics – From Fundamental Interactions to Applied Science.*  
Universität Heidelberg

**Lindner, M., Schwetz-Mangold, T.:**

*Introduction to the Standard Model II.*  
Universität Heidelberg

**Moshhammer, R., Ullrich, J.:**

*Oberseminar: "Atomic Physics: Structure and Dynamics".*  
Universität Heidelberg, MPIK

**Pfeifer, T., Moshhammer R.:**

*Bachelor Seminar: "Current Topics in Light-Matter Interactions".*  
Universität Heidelberg

**Pfeifer, T.:**

*Oberseminar: "Attosecond Physics and Quantum Control with Intense Laser Fields".*  
Universität Heidelberg, MPIK  
*Vorlesung "Ultrafast Atomic and Molecular Spectroscopy and Quantum Control".*  
Universität Heidelberg

**Schwetz-Mangold, T.:**

*Dark Matter Phenomenology.*  
CP3-origins center, Univ. of Southern Denmark, (15.02.–17.02. 2012)  
*Statistical Methods.*  
Mini-workshop in advanced statistics, MPIK, Heidelberg, Germany, (05.10.-07.10.2011)

## Summer Semester 2012

**Blaum, K., Wolf, A.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Blaum, K.:**

*Vorlesung: Stored Particles – Precision Experiments with Stored and Cooled Ions.*  
Universität Heidelberg

**Di Piazza, A.:**

*Lecture: Quantum Electrodynamics.*  
Universität Heidelberg

**Dorn, A.:**

*Oberassistent zur Übung Experimentalphysik IV (PEP4).*  
Universität Heidelberg

**Evers, J.:**

*Lecture: Advanced quantum theory.*  
Universität Heidelberg

**Fischer, D.:**

*Dynamics of Atomic and Molecular Fragmentation (Vorlesung).*  
Universität Heidelberg  
*Übungen zur Vorlesung Experimentalphysik II.*  
Universität Heidelberg

**Keitel, C. H., Harman, Z.:**

*Oberseminar: Theoretische Quantendynamik.*  
Universität Heidelberg

**Kirk, J.G.:**

*Sources of High Energy Radiation.*  
Universität Heidelberg

**Kreckel, H., Semenov D.:**

*Lecture course: Molecular Astrophysics.*  
Universität Heidelberg

**Moshhammer, R., Ullrich, J.:**

*Oberseminar: "Atomic Physics: Structure and Dynamics".*  
Universität Heidelberg, MPIK

**Pálffy, A.:**

*Tutorial for lecture: Physik IV.*  
Universität Heidelberg

**Pfeifer, T.:**

*Oberseminar "Ultrafast Physics with Lasers".*  
Universität Heidelberg, MPIK  
*Übungen zur Experimentalphysik II (PEP2).*  
Universität Heidelberg

**Rieger, F.M.:**

*AGN physics at the lower VHE band.*  
Seminar at Universität Hamburg/Desy, Hamburg, Germany

**Rodejohann, W.:**

*The Standard Model of Particle Physics.*  
Universität Heidelberg

**Wolf, A.:**

*Übungen zur Experimentalphysik II.*  
Universität Heidelberg

## Winter Semester 2012/2013

**Aharonian, F.A.:**

*Highest Energy Cosmic Rays and Intergalactic Magnetic Fields.*  
International School of Space Science, L'Aquila, Italy

**Blaum, K., Wolf, A.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Buck, C., Simgen, H., Rodejohann, W.:**

*Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.*  
Universität Heidelberg

**Crespo López-Urrutia, J.R.:**

*Physik III, Übungsgruppe.*  
Universität Heidelberg

**Di Piazza, A.:**

*Tutorial: Exercise group for Experimental Physics III.*  
Universität Heidelberg

**Dorn, A.:**

*Übungen zur Experimentalphysik III (PEP3).*  
Universität Heidelberg

**Evers, J.:**

*Tutorial for lecture: Advanced Atomic, Molecular and Optical Physics.*  
Universität Heidelberg

**Feuerstein, B.:**

*Übungen zur Experimentalphysik III.*  
Universität Heidelberg

**Fischer, D.:**

*Modern Experiments in Atomic, Molecular and Optical Physics (Master-Pflichtseminar).*  
Universität Heidelberg

**Keitel, C. H., Harman, Z.:**

*Oberseminar: Theoretische Quantendynamik.*  
Universität Heidelberg

**Kellerbauer, A.:**

*M.Sc. student seminar: Modern experiments in atomic, molecular and optical physics.*  
Universität Heidelberg

**Kirk, J.G.:**

*Sources of High Energy Radiation.*  
Universität Heidelberg

**Kreckel, H., Lange, M., Kellerbauer, A.;**

*Seminar: Moderne Themen der Quantenphysik.*  
Universität Heidelberg

**Lindner, M., Schwetz-Mangold, T.:**

*Introduction to the Standard Model II.*  
Universität Heidelberg

**Moshhammer, R., Pfeifer, T., Jochim, S.:**

*Bachelor Seminar "Per Anhalter durch die Atom- und Molekülphysik.*  
Universität Heidelberg

**Moshhammer, R., Ullrich, J.:**

*Oberseminar: "Atomic Physics: Structure and Dynamics".*  
Universität Heidelberg, MPIK

**Pfeifer, T.:**

*Oberseminar: "Physics on ultrafast time scales and in intense laser fields".*

Universität Heidelberg, MPIK

**Rieger, F.M.:**

*Lecture Course on Theoretical High Energy Astrophysics.*

Universität Heidelberg

**Schwetz-Mangold, T.:**

*Neutrinos and Dark Matter.*

42nd BUSSTEPP summer school (British Universities Summer School in Theoretical Elementary Particle Physics),  
IPPP, Durham, UK (02.09.–14.09. 2012)

**Senftleben, A., Pfeifer, T.:**

*Vorlesung "Ultrafast dynamics in atoms and molecules".*

Universität Heidelberg

## Summer Semester 2013

**Aharonian, F.A.:**

*Radiation Processes in High Energy Astrophysics.*  
IRAP PhD Erasmus Mundus School, Nice, France

**Blaum, K., Wolf, A.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Blaum, K.:**

*Vorlesung: Stored Charges particles – Precision Experiments with Stored and Cooled Particles.*  
Universität Heidelberg

**Crespo López-Urrutia, J.R., Harman, Z.:**

*Astrophysik mit hochgeladenen Ionen: Theorie und Experiment.*  
Universität Heidelberg

**Crespo López-Urrutia, J.R.:**

*Physik IV, Übungsgruppe.*  
Universität Heidelberg

**Di Piazza, A.:**

*Lecture: Quantum Electrodynamics.*  
Universität Heidelberg

**Dorn, A.:**

*Oberassistent zur Übung Experimentalphysik IV (PEP4).*  
Universität Heidelberg

**Evers, J.:**

*Lecture: Quantum Optics.*  
Universität Heidelberg

**Feuerstein, B.:**

*Übungen zur Experimentalphysik IV.*  
Universität Heidelberg

**Fischer, D.:**

*Übungen zur Vorlesung Experimentalphysik IV.*  
Universität Heidelberg

**Keitel, C. H., Harman, Z.:**

*Oberseminar: Theoretische Quantendynamik.*  
Universität Heidelberg

**Kellerbauer, A.:**

*B.Sc. student seminar: Moderne Themen der Quantenphysik.*  
Universität Heidelberg

**Kirk, J.G.:**

*Particle Acceleration.*

Summer School "High Energy Astrophysics" IMPRS Astronomy and Cosmic Physics, Universität Heidelberg (09.09.-13.09.2013)

**Kopp, J.:**

*Theoretical Astroparticle Physics.*  
Universität Heidelberg

**Kreim, S.:**

*Lecture: Stored Particles.*  
Universität Heidelberg

**Lindner, M., Marrodán Undagoitia, T.:**

*Neutrino Physics: Theory and Experiment.*  
Universität Heidelberg



**Moshhammer, R., Ullrich, J.:**

*Oberseminar: "Atomic Physics: Structure and Dynamics".*

Universität Heidelberg, MPIK

**Moshhammer, R.:**

*Übungen zur Experimentalphysik IV (PEP4).*

Universität Heidelberg

**Pfeifer, T.:**

*Oberseminar: Time-Resolved and Laser-Controlled Ultrafast Quantum Dynamics in Atoms and Molecules.*

Universität Heidelberg, MPIK

*Übungen zur Experimentalphysik IV (PEP4).*

Universität Heidelberg

**Rodejohann, W.:**

*The Standard Model of Particle Physics.*

Universität Heidelberg

**Schwetz-Mangold, T.:**

*Dark Matter.*

NIKHEF topical lectures on Dark Matter, NIKHEF, Amsterdam, Netherlands (10.06.–12.06.2013)

## Winter Semester 2013/14

**Blaum, K.:**

*Oberseminar, 14tägig: Physik mit gespeicherten und gekühlten Ionen.*  
Universität Heidelberg

**Buck, C., Simgen, H., Rodejohann, W., Marrodán Undagoitia, T.:**

*Aktuelle Themen der Astroteilchenphysik: Theorie und Experiment.*  
Universität Heidelberg

**Di Piazza, A.:**

*Tutorial for lecture: Advanced Atomic, Molecular and Optical Physics.*  
Universität Heidelberg

**Dorn, A.:**

*Excercise group Physics III (Optics and Quantum Physics).*  
Universität Heidelberg

**Evers, J.:**

*Tutorial coordinator for lecture: Advanced Atomic, Molecular and Optical Physics.*  
Universität Heidelberg

**Fischer, D.:**

*Übungen zur Vorlesung "Advanced Atomic, Molecular, and Optical Physics".*  
Universität Heidelberg

**Harman, Z., Crespo López-Urrutia, J. R.:**

*Lecture: Introduction to the physics of highly charged ions.*  
Universität Heidelberg

**Keitel, C. H., Harman, Z.:**

*Oberseminar: Theoretische Quantendynamik.*  
Universität Heidelberg

**Kopp, J., Schaefer, B. M.:**

*Mathematischer Vorkurs für Physiker.*  
Universität Heidelberg

**Kreckel, H., Semenov D.:**

*Lecture course: Molecular Astrophysics.*  
Universität Heidelberg

**Kreim, S.:**

*Lecture: Quantum electro dynamics: modern experiments and theory.*  
Universität Heidelberg

**Kumar, N., Berseneva, E., Keitel, C. H.:**

*Tutorial for lecture: Experimental Physics III.*  
Universität Heidelberg

**Lindner, W., Rodejohann, W.:**

*The Standard Model of Particle Physics II: Theory.*  
Universität Heidelberg

**Moshhammer, R., Ullrich, J.:**

*Oberseminar: "Atomic Physics: Structure and Dynamics".*  
Universität Heidelberg, MPIK

**Moshhammer, R.:**

*Graduate Days Lecture: „Ultrafast atomic reactions“.*  
Universität Heidelberg

**Pálffy, A.:**

*Lecture: Nuclear and atomic quantum dynamics with the x-ray free electron laser.*  
Universität Heidelberg

**Pfeifer, T.:**

*Oberseminar: Oberseminar/Journal Club: Time-Domain Quantum Dynamics in Atoms and Molecules.*

Universität Heidelberg, MPIK

*Übungen zur Vorlesung Advanced Atomic, Molecular, and Optical Physics.*

Universität Heidelberg

**Rieger, F.:**

*Lecture Course on Theoretical High Energy Astrophysics.*

Universität Heidelberg

**Wolf, A.:**

*Tutorial on Advanced Atomic, Molecular and Optical Physics.*

Universität Heidelberg

# Institutional Collaborations

## **A Reaction Microscope for Positron-Impact Ionization Studies:**

Australian National University, Canberra, Australia

## **Active Galactic Nuclei**

DIAS, Dublin, Ireland

## **AHEAD (Integrated Activities for High Energy Astrophysics Domain):**

Istituto Nazionale di Astrofisica, Italy

Université de Genève, Switzerland

Space Research Organization, Netherlands

University of Leicester, UK

Danmarks Tekniske Universitet, Kgs. Lyngby, Denmark

Technion Israel Institute of Technology, Haifa, Israel

Max-Planck-Institut für Extraterrestrische Physik, München, Germany

Università degli studi di Genova e sezione INFN, Italy

Université de Mons, Belgium

The University of Birmingham, UK

National Observatory of Athens, Greece

Commissariat à l'Énergie Atomique CEA Saclay, France

Centre National de la Recherche Scientifique, IAPS, France

Physikalisch-Technische Bundesanstalt Braunschweig, Germany

Sabancı University Istanbul, Turkey

Foundation of Research and Technology- Hellas, Iraklio, Greece

Thales Alenia Space, Italy

N. Copernicus Astronomical Center Warsaw, Poland

Institut Laue-Langevin Grenoble, France

Istituto Fotonica e Nanotecnologie CNR, Italy

Universidad de Cantabria Santander, Spain

Università di Ferrara, Italy

Université de Liège, Belgium

Instituto de Ciencias del Espacio, CSIC, Spain

Centro de Astrobiología, CSIC, Spain

University of Alicante, Spain

Istituto Nazionale Fisica Nucleare, Sez. Trieste, Italy

Academy of Sciences and Technical University Prague, Czech Republic

Laboratoire d'Astrophysique de Marseille, France

Institut d'Astrophysique Spatiale, Centre universitaire d'Orsay, France

## **ARIEL-EBIS for reacceleration of short lived radioactive isotopes:**

TRIUMF, Vancouver, Canada

## **Astro-H mission**

ISAS/JAXA, Tokyo, Japan

## **Attosecond Transient Absorption Spectroscopy:**

Universidad Autónoma de Madrid, Spain

Technische Universität München, Germany

## **Borexino at LNGS:**

Dipartimento di Fisica, Università degli Studi e INFN, Milano, Italy

Physics Department, Princeton University, Princeton, USA

Institut für Experimentalphysik, Universität Hamburg, Germany

INFN Laboratori Nazionali del Gran Sasso, Assergi, Italy

Physics Department, Virginia Polytechnic Institute and State University, Blacksburg, USA

Physics Department, University of Massachusetts, Amherst, USA

Lomonosov Moscow State University Skobeltsyn Institute of Nuclear Physics, Moscow, Russia

Department of Physics, University of Houston, Houston, USA

St. Petersburg Nuclear Physics Institute, Gatchina, Russia

NRC Kurchatov Institute, Moscow, Russia

Joint Institute for Nuclear Research, Dubna, Russia  
APC, Univ. Paris Diderot, CNRS/IN2P3, CEA/Irfu, Obs. de Paris, Sorbonne Paris Cite, France  
Physik Department, Technische Universität München, Garching, Germany  
Kiev Institute for Nuclear Research, Kiev, Ukraine  
Dipartimento di Fisica, Università e INFN, Genova, Italy  
M. Smoluchowski Institute of Physics, Jagiellonian University, Cracow, Poland  
Dipartimento di Chimica, Università e INFN, Perugia, Italy  
Istituto de Física Corpuscular, Valencia, Spain  
Physics and Astronomy Department, University of California Los Angeles (UCLA), Los Angeles, USA  
M. Smoluchowski Institute of Physics, Jagiellonian University, Cracow, Poland

**Carrier-Envelope Phase Spectral Interferometry:**

National Laboratory for Ultrafast and Ultraintense Optical Science-CNR-INFN Milano, Italy  
Universität Erlangen-Nürnberg, 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  
GSI Darmstadt, Germany  
Universität Mainz, Germany  
CERN Geneva, Switzerland  
University of Manchester, UK

**Compact Gamma-Ray binaries**

University of Barcelona, Spain

**Cryogenic Experiments on Trapped Molecular and Cluster Ions:**

Universität Heidelberg, Germany  
Universität Greifswald, Germany  
Raman Center for Atomic, Molecular and Optical Science, India  
Weizmann Institute of Science, Rehovot, Israel

**Cryogenic Paul traps:**

Aarhus University, Denmark

**Cryogenic Storage Ring:**

Université Catholique de Louvain-La-Neuve, Belgium  
Weizmann Institute of Science, Rehovot, Israel

**CTA:**

Centro de Investigaciones en Láseres y Aplicaciones (CEILAP-CITEFA/CONICET), Argentina  
Instituto de Tecnologías en Detección y Astropartículas (CNEA/CONICET/UNSAM), Argentina  
Centro Atómico Bariloche (CNEA-CONICET-IB/UNCUYO), Bariloche, Argentina  
Instituto de Astronomía y Física del Espacio (CONICET-UBA), Buenos Aires, Argentina  
Instituto Argentino de Radioastronomía (CCT La Plata-CONICET), La Plata, Argentina  
UID GEMA – Departamento de Aeronáutica (Facultad de Ingeniería, UNLP), La Plata, Argentina  
Alikhanyan National Science Laboratory, Yerevan, Armenia  
Institut für Astro- und Teilchenphysik, Leopold-Franzens-Universität, Innsbruck, Austria  
Centro de Ciências Naturais e Humanas, Universidade Federal do ABC, Brazil  
Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil  
Instituto de Astronomia, Geofísica, e Ciências Atmosféricas, Universidade de São Paulo, Brazil  
Instituto de Física, Universidade de São Paulo, Brazil  
Instituto de Física de São Carlos, Universidade de São Paulo, Brazil  
Instituto de Física, Universidade Federal do Rio de Janeiro, Brazil  
Núcleo de Formação de Professores, Universidade Federal de São Carlos, 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  
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  
 Aalto University, Finland  
 University of Helsinki, Finland  
 Department of Physics, University of Oulu, Finland  
 Tuorla Observatory, University of Turku, 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 Planétologie et d'Astrophysique (IRAP), CNRS, Université Paul Sabatier, Toulouse, France  
 CEA/DSM/IRFU, Saclay, France  
 Laboratoire d'Annecy-le-Vieux de Physique des Particules, Université de Savoie, CNRS/IN2P3, Annecy, France  
 Laboratoire Leprince-Ringuet, École Polytechnique (UMR 7638, CNRS), Paris, France  
 LPNHE, University of Pierre et Marie Curie, Paris 6, University of Denis Diderot, Paris 7, CNRS/IN2P3, Paris, France  
 Laboratoire Univers et Particules de Montpellier, Université Montpellier 2, CNRS/IN2P3, Montpellier, France  
 Observatoire de Paris, LUTH and GEPI, CNRS, Université Paris Diderot, Paris, France  
 Institut für Physik, Humboldt-Universität zu Berlin, Germany  
 Institut für Theoretische Physik, Weltraum- und Astrophysik, Ruhr-Universität Bochum, Germany  
 Department of Physics, TU Dortmund, Germany  
 Universität Erlangen-Nürnberg, Physikalisches Institut, Erlangen, Germany  
 Universität Hamburg, Institut für Experimentalphysik, Hamburg, Germany  
 Landessternwarte, Universität Heidelberg, Germany  
 Max-Planck-Institut für Physik, München, Germany  
 Institut für Physik and Astronomie, Universität Potsdam, Germany  
 Institut für Astronomie und Astrophysik, Universität Tübingen, Germany  
 Institute for Theoretical Physics and Astrophysics, Universität 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, Greece  
 Bhabha Atomic Research Centre (BARC), India  
 Saha Institute of Nuclear Physics, India  
 Tata Institute of Fundamental Research (TIFR), Mumbai, India  
 Dublin Institute for Advanced Studies, Ireland  
 University College Dublin, Ireland  
 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, 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, Italy  
 INAF – Telescopio Nazionale Galileo, Roma, Italy  
 Dipartimento di Fisica, Università degli Studi di Padova, Italy  
 Università di Siena and INFN, Siena, Italy  
 University of Udine and INFN Sezione di Trieste, Italy  
 Department of Physics and Mathematics, Aoyama Gakuin University, Japan  
 Hiroshima Astrophysical Science Center, Hiroshima University, Japan  
 Department of Physical Science, Hiroshima University, Japan  
 Faculty of Science, Ibaraki University, Japan  
 Institute of Particle and Nuclear Studies, KEK (High Energy Accelerator Research Organization), Japan  
 Dept. of Physics, Kinki University, Japan  
 School of Allied Health Sciences, Kitasato University, Japan  
 Department of Physics, Konan University, Japan

Department of Astronomy, Kyoto University, Japan  
 Department of Physics, Kyoto University, Japan  
 Yukawa Institute for Theoretical Physics, Kyoto University, Japan  
 Department of Applied Physics, University of Miyazaki, Japan  
 Kobayashi-Maskawa Institute (KMI) for the Origin of Particles and the Universe, Nagoya University, Japan  
 Department of Physics and Astrophysics, Nagoya University, Japan  
 Solar-Terrestrial Environment Laboratory, Nagoya University, Japan  
 Department of Earth and Space Science, Graduate School of Science, Osaka University, Japan  
 Graduate School of Science and Engineering, Saitama University, Japan  
 Department of Physics, Tokai University, Japan  
 Tokai University Hospital, Japan  
 Institute of Socio-Arts and Sciences, University of Tokushima, Japan  
 Interactive Research Center of Science, Tokyo Institute of Technology, Tokyo, Japan  
 Department of Physics, Graduate School of Science, University of Tokyo, Tokyo, Japan  
 Institute for Cosmic Ray Research, University of Tokyo, Tokyo, Japan  
 Faculty of Science and Engineering, Waseda University, Japan  
 Department of Physics, Yamagata University, Japan  
 Faculty of Management Information, Yamanashi Gakuin University, Japan  
 Universidad Nacional Autónoma de México, Mexico City, Mexico  
 University of Namibia, Department of Physics, Namibia  
 Astronomical Institute Anton Pannekoek, University of Amsterdam, The Netherlands  
 Department of Physics and Technology, University of Bergen, Norway  
 Academic Computer Centre CYFRONET AGH, Kraków, Poland  
 Faculty of Electrical Engineering, Automatics, Computer Science and Electronics, AGH University of Science and Technology, Kraków, Poland  
 Faculty of Physics, Astronomy and Applied Computer Science, Jagiellonian University, Poland  
 Copernicus Astronomical Center, Polish Academy of Sciences, Poland  
 Space Research Centre, Polish Academy of Sciences, Poland  
 Institute of Nuclear Physics, Polish Academy of Sciences, Poland  
 Toruń Centre for Astronomy, Nicolaus Copernicus University, Poland  
 Faculty of Physics and Applied Computer Science, University of Łódź, Poland  
 Faculty of Physics, University of Warsaw, 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  
 CIEMAT, Madrid, Spain  
 Institut de Física d'Altes Energies, Barcelona, Spain  
 Institut de Ciències de l'Espai (IEEC-CSIC), Barcelona, Spain  
 Institut de Ciències de l'Espai (IEEC-CSIC) and Institució Catalana de Recerca i Estudis Avancats (ICREA), Spain  
 Instituto de Astrofísica de Canarias, Spain  
 Grupo de Altas Energías. Universidad Complutense de Madrid, Spain  
 Grupo de Electronica, Universidad Complutense de Madrid, Spain  
 Escuela Politécnica Superior de Jaén, Universidad de Jaén, Spain  
 Departament de Física, and CERES-IEEC, Universitat Autònoma de Barcelona, E-08193 Bellaterra, Spain  
 Departament d'Astronomia i Meteorologia, Institut de Ciències del Cosmos (ICC), Universitat de Barcelona (IEEC-UB), 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  
 Laboratory for High Energy Physics, École Polytechnique Fédérale, Switzerland  
 ETH Zürich, Institute for Particle Physics, Switzerland  
 University of Geneva, Département de Physique Nucléaire et Corpusculaire, Switzerland  
 ISDC Data Centre for Astrophysics, Observatory of Geneva, University of Geneva, Switzerland  
 Physik-Institut, Universität Zürich, Switzerland  
 Dept. of Physics and Centre for Advanced Instrumentation, Durham University, UK  
 STFC Rutherford Appleton Laboratory, UK  
 School of Physics and Astronomy, University of Edinburgh, UK  
 Centre for Astrophysics Research, Science and Technology Research Institute, University of Hertfordshire, UK

Dept. of Physics and Astronomy, University of Leicester, UK  
University of Liverpool, Oliver Lodge Laboratory, Liverpool, UK  
School of Physics and Astronomy, University of Nottingham, UK  
University of Oxford, Department of Physics, Oxford, UK  
Department of Physics and Astronomy, University of Sheffield, Sheffield, UK  
School of Physics and Astronomy, University of Southampton, UK  
Astronomy Department, Adler Planetarium and Astronomy Museum, Chicago, USA  
Argonne National Laboratory, USA  
Dept. of Physics & Astronomy, Barnard College, Columbia University, NY, USA  
Dept. of Physics, Columbia University, NY, USA  
Center for Relativistic Astrophysics and School of Physics, Georgia Institute of Technology, Atlanta, USA  
Harvard-Smithsonian Center for Astrophysics, Cambridge, USA  
Department of Physics and Astronomy, Iowa State University, USA  
Dept. of Astronomy and Astrophysics, Pennsylvania State University, USA  
Department of Physics, Pittsburg State University, USA  
Department of Physics, Purdue University, USA  
Santa Cruz Institute for Particle Physics and Department of Physics, University of California, Santa Cruz, USA  
Kavli Institute for Particle Astrophysics and Cosmology, Department of Physics and SLAC National Accelerator Laboratory, Stanford University, USA  
University of Alabama in Huntsville, Center for Space Physics and Aeronomic Research, Huntsville, USA  
Department of Physics and Astronomy, University of California, Los Angeles, USA  
University of California, Davis, USA  
Enrico Fermi Institute, University of Chicago, Chicago, USA  
Department of Physics and Astronomy and the Bartol Research Institute, University of Delaware, Newark, USA  
Department of Physics and Astronomy, University of Iowa, Iowa City, USA  
School of Physics and Astronomy, University of Minnesota, Minneapolis, USA  
Department of Physics and Astronomy, University of Utah, Salt Lake City, USA  
Department of Physics, Washington University, St Louis, USA  
Yale University, Department of Physics and Astronomy, New Haven, USA

**DAAD: Multi-wavelength observations of dark sources from radio to TeV energies**

IFAE, Barcelona, Spain

**DAAD: The Radio Emission from Supernova 1987A**

University of Western Australia

**DFG-DST Joint Project ‘Neutrinos as Precision Probes of Particle Physics, Cosmology and Astrophysics’:**

Harish-Chandra Research Institute, India

**Dielectronic Recombination of Multicharged Ions:**

Universität Giessen, Germany

**Dielectronic recombination rate coefficients for astrophysical applications:**

Universität Giessen, Germany

Columbia University, New York, USA

**Double Chooz**

DAPNIA CEA/ Saclay, France

APC Paris, France

Subatech Nantes, France

IPHC Strasbourg, France

Technische Universität München, Germany

EKU Tübingen, Germany

RWTH Aachen, Germany

University of Alabama, USA

Argonne National Laboratory, USA

University of Chicago, USA

Barnard College, USA

Drexel University, USA

University of Alabama, USA

Kansas State University, USA

Louisiana 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, Japan  
Kobe University, Japan  
Tokyo Institute of Technology, Japan  
Niigata University, Japan  
Miyagi University of Education, Japan  
Tokyo Metropolitan University, Japan  
Hiroshima Institute of Technology, Japan  
University of Sussex, UK  
RAS Moscow, Russia  
RRC Kurchatov Institute Moscow, Russia  
CBPF Rio de Janeiro, Brazil  
UNICAMP, Brazil

**Electron Target for the New Experimental Storage Ring (NESR):**

GSI Darmstadt, Germany

**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

**EUROnu:**

Science and Technology Facilities Council, STFC, UK  
Commissariat à l'Énergie Atomique, CEA, France  
European Organisation for Nuclear Research, CERN, Switzerland  
University of Glasgow, UK  
Imperial College of Science, Technology and Medicine, Imperial, UK  
Consejo Superior de Investigaciones Científicas, CSIC, Spain  
Centre National de la Recherche, CNRS, France  
Cracow University of Technology, CUT, Poland  
University of Durham, UDUR, UK  
Istituto Nazionale di Fisica Nucleare, INFN, Italy  
The Chancellor, Masters and Scholars of the University of Oxford, UOXF.DL, UK  
Sofia University St. Kliment Ohridski, UniSofia, Bulgaria  
University of Warwick, UK  
Université Catholique de Louvain, UCL, Belgium

**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  
Technische 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, Europe  
ICRAR/University of Western Australia, Australia  
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

**Gamma-Ray Bursts**

Nanjing University, China

**GERDA:**

Institute of Physics, Jagellonian University, Cracow, Poland  
Institut für Kern- und Teilchenphysik, Technische Universität Dresden, Germany  
Joint Institute for Nuclear Research, Dubna, Russia  
Institute for Reference Materials and Measurements, 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 Assergi, Italy  
INFN Milano Bicocca and Università Milano Bicocca, Italy  
INFN Milano and Università degli Studi di Milano, Italy  
Max-Planck-Institut für Physik, München, Germany  
Technische Universität München Physik-Department E15, Germany  
Dipartimento di Fisica e Astronomia, Università di Padova, Italy  
Center for Astro and Particle Physics Eberhard Karls University, Tübingen, Germany  
Physik Institut, University of Zürich Technische Universität München, Germany

**GLoBES:**

Fermilab, USA  
Virginia Tech, Blacksburg, USA  
Universität Würzburg, Würzburg, Germany

**H.E.S.S.:**

Universität Hamburg, Institut für Experimentalphysik, Hamburg, Germany  
Dublin Institute for Advanced Studies, Dublin, Ireland  
National Academy of Sciences of the Republic of Armenia, Yerevan, Armenia  
Institut für Physik, Humboldt-Universität zu Berlin, Berlin, Germany  
Universität Erlangen-Nürnberg, Erlangen, Germany  
University of Namibia, Windhoek, Namibia  
University of Durham, Durham, UK  
DESY, Zeuthen, Germany  
Institut für Physik und Astronomie, Universität Potsdam, Germany  
Nicolaus Copernicus Astronomical Center, Warsaw, Poland  
Department of Physics and Electrical Engineering, Linnaeus University, Växjö, Sweden  
Institut für Theoretische Physik, Ruhr-Universität Bochum, Bochum, Germany  
Institut für Astro- und Teilchenphysik, Leopold-Franzens-Universität Innsbruck, Innsbruck, Austria  
Laboratoire Leprince-Ringuet, Ecole Polytechnique, CNRS/IN2P3, Palaiseau, France  
Centre for Space Research, North-West University, Potchefstroom, South Africa  
LUTH, Observatoire de Paris, CNRS, Université Paris Diderot, Meudon, France  
LPNHE, Université Pierre et Marie Curie Paris 6, Université Denis Diderot Paris 7, CNRS/IN2P3, Paris, France  
Institut für Astronomie und Astrophysik, Universität Tübingen, Tübingen, Germany  
DSM/Irfu, CEA Saclay, Gif-Sur-Yvette, France  
Astronomical Observatory, The University of Warsaw, Warsaw, Poland  
School of Physics, University of the Witwatersrand, Johannesburg, South Africa  
Landessternwarte, Universität Heidelberg, Heidelberg, Germany  
Oskar Klein Centre, Department of Physics, Stockholm University, Albanova University Center, Stockholm, Sweden  
Université Bordeaux 1, CNRS/IN2P3, Centre d'Etudes Nucléaires de Bordeaux Gradignan, Gradignan, France  
School of Chemistry & Physics, University of Adelaide, Adelaide, Australia  
APC, AstroParticule et Cosmologie, Université Paris Diderot, CNRS/IN2P3, CEA/Irfu, Observatoire de Paris, Sorbonne Paris Cité, France  
UJF-Grenoble 1 / CNRS-INSU, Institut de Planétologie et d'Astrophysique de Grenoble (IPAG) UMR 5274, Grenoble, France  
Department of Physics and Astronomy, The University of Leicester, Leicester, UK  
Instytut Fizyki Jadrowej PAN, Krakow, Poland  
Laboratoire Univers et Particules de Montpellier, Université Montpellier 2, CNRS/IN2P3, CC 72, Montpellier, France

Laboratoire d'Annecy-le-Vieux de Physique des Particules, Université de Savoie, CNRS/IN2P3, Annecy-le-Vieux, France

Obserwatorium Astronomiczne, Uniwersytet Jagiellonski, Krakow, Poland

Torun Centre for Astronomy, Nicolaus Copernicus University, Torun, Poland

Department of Physics, University of the Free State, Bloemfontein, South Africa

Charles University, Faculty of Mathematics and Physics, Institute of Particle and Nuclear Physics, Prague, Czech Republic

#### **Herschel-ATLAS**

CALTECH, USA

CEA, France

CNRS, France

CFA, USA

ESA, Europe

ESO, Europe

NASA, USA

IAC, Spain

IAP, France

Imperial College London, UK

Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Padova, Italy

IPAC, USA

IRAM, Europe

JPL, USA

Open University, UK

ROE, UK

SISSA, Italy

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

#### **Herschel-HiGal**

ASIS, Italy

CALTECH, USA

CEA, France

CITA, Canada

CNRS, France

CFA, USA

ESA, Europe

ESO, Europe

NASAUSA

IAC, Spain

IAP, France

INAF, Italy

Imperial College London, UK

Istituto Nazionale di Astrofisica, Osservatorio Astronomico di Padova, Italy

IPAC, USA

IRAM, Europe

JPL, USA

Open University, UK

ROE, UK

SISSA, Italy

University College London, UK

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  
University of Toronto, Canada

**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

**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, Denmark  
CNRS, France  
Universität Göttingen-DESY, 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  
Milano Bicocca 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, UK

**ISOLTRAP:**

Katholieke Universiteit Leuven Heverlee, Belgium  
CSNCF-IN2P3-CNRS, France  
Universität Greifswald, Germany  
GSI Darmstadt, Germany  
TU Dresden, Germany  
CERN, Switzerland  
University of Manchester, UK  
Michigan State University, USA

**LAGUNA:**

ETH Zürich, Switzerland  
University of Bern, Switzerland  
University of Jyväskylä, Finland  
University of Oulu, Finland  
Kalliosuunnittelu Oy Rockplan Ltd, Finland  
Commissariat à l'Énergie Atomique / Direction des Sciences de la Matière, France  
Institut National de Physique Nucléaire et de Physique des Particules CNRS/IN2P3, France  
Technische Universität München, Germany  
H. Niewodniczanski, Institute of Nuclear Physics of the Polish, Poland

**LaSpec:**

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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  
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  
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  
*Team leader:* Alexander Leflat  
 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  
 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

**Lifetime Measurements on Metastable States in Multicharged Ions:**

Ruhr-Universität Bochum, Germany

**Low Energy Storage Rings:**

National Institute of Radiological Sciences, Chiba, Japan  
 University of Kyoto, Japan

**MAPIP (Modelling of Astrophysical Photo-Ionised Plasma):**

Technion, Haifa, Israel



SRON Utrecht, Netherlands  
University College London, MSSL, UK  
University of Haifa, Israel

**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, 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

**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:**

Institute of Semiconductor Physics, Novosibirsk, Russia

**PIPE – Ein Photon-Ion-Spektrometer für PETRAIII:**

Universität Giessen, Germany  
Universität Hamburg, Germany  
Freie Universität Berlin, Germany  
Universität Frankfurt, Germany

**Pulsar wind hydrodynamics**

MEPHI, Moscow, Russia

**Reaktionsmikroskopie für die Dosimetrie:**

Physikalisch Technische Bundesanstalt, Braunschweig, Germany

**Röntgenmetrologie mit Synchrotronstrahlungsquellen:**

Universität Jena, 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

**Sonderforschungsbereich SFB-TR27 'Neutrinos and Beyond':**

Eberhard Karls Universität Tübingen, Germany  
Universität (TH)/Forschungszentrum (FZ) Karlsruhe, Germany  
Max-Planck-Institut für Physik, Werner-Heisenberg-Institut, München, Germany  
Max-Planck-Institut für Astrophysik, Garching, Germany  
Technische Universität München, TUM, 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-Synchrotron 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

Swietokrycka Academy Kielco, 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  
Peteresburg Nuclear Physics Institute, Russia  
Lebedev Physical Institute Moscow, Russia  
St. Petersburg State University, Russia  
Institute of Metrology for Time and Space Mendelevo, 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-Smithonian 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

#### **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 Köln, Germany  
ESA/ESTEC Noordwijk, The Netherlands  
Imperial College, London, UK  
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 für Astronomie Heidelberg, Germany  
MPI für 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  
Università di Roma, Italy  
University of Oxford, UK  
University of Cambridge, UK  
University of Tokyo, Japan

**Stored and Cooled Molecular Ions:**

Université Catholique de Louvain-La-Neuve, Belgium  
University of Le Havre, France  
Weizmann Institute of Science, Rehovot, Israel

**Surface interactions of highly charged ions on diamonds:**

University of the Witwatersrand, South Africa

**Surface interactions of highly charged ions:**

TU Wien, Austria

**The Galaxy in molecular clouds**

University of Nagoya, Nagoya, Japan

**TIFF: Trapped Ion Fragmentation at FLASH (DESY):**

University of Aarhus, Denmark  
Arbeitsgruppe Elektronenspektroskopie des Max-Planck-Instituts für Plasmaphysik, Berlin, Germany  
Universität Hamburg, Germany  
Weizmann Institute of Science, Rehovot, Israel

**TRIUMF-EBIT for mass measurements using highly charged ions:**

TRIUMF, Vancouver, Canada

**VHE Gamma-Ray sources**

University of Adelaide, Australia

**XENON:**

Laboratori Nazionali del Gran Sasso, Italy  
University of Bologna and INFN-Bologna, Italy  
Columbia University, USA  
University of Coimbra, Portugal  
Rice University, USA  
University of L'Aquila, Italy  
University of California, USA  
Johannes Gutenberg Universität Mainz, Germany  
Wilhelms-Universität Münster, Germany  
Nikhef and the University of Amsterdam, Netherlands  
Purdue University, USA  
SUBATECH, France  
University of Torino and INFN-Torino, Italy  
Weizmann Institute of Science, Israel



University of Zurich, Switzerland  
University of Bern, Switzerland

**XFEL REMI bei DESY:**

Universität Frankfurt, Germany  
DESY Hamburg, Germany

# Jointly Organized Conferences and Workshops

Antwerp, Belgium, Workshop on Multi-Partonic Interactions at the LHC (02.12.-06.12.2013)

**M. Schmelling**

Bad Honnef, Germany, 479. WE-Heraeus Seminar: Physics at LHCb (26.04.-29.04.2011)

**M. Schmelling**

Barcelona, Spain, 3<sup>rd</sup> High Energy Phenomena in Relativistic Outflows (HEPRO III) meeting (27.06.-01.07.2011)

**F. A. Aharonian**

Barcelona, Spain, Exploring the Non-thermal Universe with Gamma Rays (06.11.-09.11.2012)

**E. de Ona Wilhelmi**

Berlin, Germany, International Conference on Many Particle Spectroscopy of Atoms, Molecules, Clusters and Surfaces (MPS) (27.08.-01.09.2012)

**A. Dorn, U. Becker**

Darmstadt, Germany, Physics Prospects at FLAIR – The Facility for Low-Energy Antiproton and Ion Research (03.05.-04.05.2012)

**K. Blaum**

Dublin, Dublin Summer School on High Energy Astrophysics (04.07.-15.07.2011)

**F.A. Aharonian**

Dublin, Multi-GeV Astrophysics with Ground-Based Detectors, first joint DIAS/Dublin-OKC/Stockholm workshop (12.12.-14.12.2011)

**F.A. Aharonian**

Geneva, Switzerland, 13<sup>th</sup> International Workshop on Neutrino Factories, Superbeams and Betabeams (NuFact11) (01.08.-06.08.2011)

**T. Schwetz-Mangold**

Geneva, Switzerland, CERN Theory Institute, Dark Matter underground and in the heavens (18.07.-29.07.2011)

**T. Schwetz-Mangold**

Geneva, Switzerland, CERN, TSR@ISOLDE Workshop (29.10.-30.10.2012)

**S. Kreim**

Geneva, Switzerland, Workshop on Multi-Partonic Interactions at the LHC (03.12.-07.12.2012)

**D. Volyanskyy**

Göttingen, Germany, spring meeting of the DPG 1012 (27.02.-02.03.2012)

**T. Schwetz-Mangold**

Hamburg, Germany, DESY, Workshop on Multi-Partonic Interactions at the LHC (21.11.-25.11.2011)

**M. Schmelling**

Hannover, Germany, spring meeting of the DPG 2013, Symposium "Electronic 2D Spectroscopy from Small to Large Systems (SYED)" (18.03.2013)

**T. Pfeifer, T. Brixner, E. Riedle**

Heidelberg, Germany, 16<sup>th</sup> International Conference on Physics of Highly Charged Ions (HCI) (02.09.-07.09.2012)

**D. Fischer, J. Ullrich, J.R. Crespo López-Urrutia**

Heidelberg, Germany, 17. Deutsche Physikerinnentagung (31.10.-03.11.2013)

**R. Hubele, M. Schwarz, E. Jordan**

Heidelberg, Germany, 4<sup>th</sup> High Energy Phenomena in Relativistic Outflows (HEPRO IV) meeting (23.07.-26.07.2013)

**F.A. Aharonian, F.M. Rieger**

Heidelberg, Germany, 5<sup>th</sup> Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy (09.07.-13.07.2012)

**F.A. Aharonian, W. Hofmann, F.M. Rieger**

Heidelberg, Germany, 5<sup>th</sup> International Workshop on Electrostatic Storage Devices, ESD 2013 (17.06.-21.06.2013)

**A. Wolf**

Heidelberg, Germany, International Max-Planck Research School (IMPRS) for Astronomy and Cosmic Physics,  
Heidelberg Summer School on High Energy Astrophysics (09.09.-13.09.2013)  
**F.A. Aharonian, W. Hofmann, F.M. Rieger**

Heidelberg, Germany, International School on Astroparticle Physics "ISAPP11" (08.07.-15.07.2011)  
**E. Akhmedov, W. Rodejohann**

Heidelberg, Germany, Laboratory Astrochemistry External Retreat (20.10.-21.10.2011)  
**A. Wolf**

Heidelberg, Germany, MPIK, International Workshop on Baryon and Lepton Number Violation (BLV2013) (08.04.-  
12.04.2013)  
**E. Akhmedov, P. Fileviez Perez, W. Rodejohann, T. Schwetz-Mangold**

Heidelberg, Germany, Workshop on Galactic Centre (17.10.-20.10.2011)  
**F.A. Aharonian, R. Crocker, D. Jones**

Heidelberg, Germany, Workshop on Quantum Dynamics in Physics, Chemistry and Biology (15.11.2012)  
**C.H. Keitel, A. Di Piazza**

Les Houches, France, Winter Workshop on Recent QCD Advances at the LHC (13.02.-18.02.2011)  
**M. Schmelling**

Lumley Castle, UK, Invisibles13 Workshop (15.07.-19.07.2013)  
**T. Schwetz-Mangold**

Lyon, France, Neutrinos at the forefront of elementary particle physics and astrophysics (22.10.-24.10.2012)  
**T. Schwetz-Mangold**

Moscow, Russia, XVIth Lomonosov Conference on Elementary Particle Physics (22.08.-28.08.2013)  
**E. Akhmedov**

Moscow, Russia, XVth Lomonosov Conference on Elementary Particle Physics (18.08-24.08.2011)  
**E. Akhmedov**

Muonio, Finland, Extragalactic Astronomy with the Cherenkov Telescope Array (18.03.-21.03.2013)  
**S. Inoue**

Natal, Brazil, XXIVth Workshop on Weak Interactions and Neutrinos (WIN 2013) (16.09.-21.09.2013)  
**T. Schwetz-Mangold**

Preston, United Kingdom, The Spectral Energy Distribution of Galaxies, IAU Symposium 284 (05.09.-09.09.2011)  
**R. Tuffs**

Ringberg Castle, Germany, 3<sup>rd</sup> Meeting on Science with FELs (17.02.-20.02.2013)  
**R. Moshhammer**

Rostock, Germany, 14<sup>th</sup> International Workshop on the Physics of Non-Ideal Plasmas (09.09.-14.09.2012)  
**C.H. Keitel**

Stockholm, Sweden, Stockholm University, Oskar Klein Centre for Cosmoparticle Physics, Alba Nova University Centre,  
2<sup>nd</sup> International OKC-DIAS Workshop "Science with H.E.S.S. II" (23.10.-25.10.2013)  
**F.A. Aharonian**

Valday, Novgorod region, Russia, The International Workshop on Non-Accelerator New Physics (NANPino-2013)  
(24.06.-29.06.2013)  
**A. Smolnikov**