

# Institutional Collaborations

## Attosecond XUV + NIR experiments resolved in reaction microscopes:

University of Freiburg, Germany

### BASE:

RIKEN, Japan  
University of Hannover, Germany  
CERN, Switzerland  
GSI, Germany  
University of Tokyo, Japan  
University of Mainz, Germany  
Helmholtz-Institut Mainz, Germany  
PTB, Germany

## CEP dependence of atomic and molecular strong-field processes:

MPI für Quantenoptik Garching, Germany

### COLLAPS:

KU Leuven, Belgium  
Universität Mainz, Germany  
CERN Geneva, Switzerland  
University of Manchester, UK  
University of Liverpool, UK  
TU Darmstadt, Germany  
IPNO, IN2P3 Paris, France  
Beijing University, China

## Compact Gamma-Ray binaries:

University of Barcelona, Spain

## Cryogenic Experiments on Trapped Molecular and Cluster Ions:

Universität Greifswald, Germany  
Weizmann Institute of Science, Rehovot, Israel  
TU Kaiserslautern, Germany

## Cryogenic Multi-Pixel Microcalorimeters for Molecular Fragments:

Universität Heidelberg, Germany

## Cryogenic Storage Ring:

Weizmann Institute of Science, Rehovot, Israel  
Universität Greifswald, Germany  
Université Catholique de Louvain-La-Neuve, Belgium  
Universität Giessen, Germany  
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**Dielectronic Recombination of Multicharged Tungsten Ions:**

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**Dissociative Recombination of Molecular Ions:**

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**Double Chooz:**

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University of Notre Dame, USA  
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**Galaxy and Mass Assembly, GAMA:**

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Kavli IPMU, Kavli Institute for the Physics and Mathematics of the Universe, UTIAS, The University of Tokyo Institutes for Advanced Study, The University of Tokyo, Kashiwa City, Japan  
Department of Physics, The University of Tokyo, Tokyo, Japan  
Riken, Saitama, Japan  
UNAM, University of Namibia, Department of Physics, Windhoek, Namibia  
Astronomical Observatory, The University of Warsaw, Warsaw, Poland  
IFJ-PAN, Instytut Fizyki Jądrowej, Kraków, Poland  
Nicolaus Copernicus Astronomical Center, Polish Academy of Sciences, Warsaw, Poland  
Obserwatorium Astronomiczne, Uniwersytet Jagiellonski, Kraków, Poland  
Torun Centre for Astronomy, Faculty of Physics, Astronomy and Informatics, Nicolaus Copernicus University, Torun, Poland  
Department of Physics, University of the Free State, Bloemfontein, South Africa  
Unit for Space PHysics, North-West University, Potchefstroom, South Africa  
School of Physics, University of the Witwatersrand, Johannesburg, South Africa  
Oskar Klein Centre, Department of Physics, Stockholm University, Albanova University Center, Stockholm, Sweden  
Department of Physics and Electrical Engineering, Linnaeus University, Växjö, Sweden  
GRAPPA, Institute of High-Energy Physics, University of Amsterdam, Science Park, Amsterdam, The Netherlands  
Department of Physics and Astronomy, The University of Leicester, Leicester, United Kingdom  
Department of Physics, The Oxford University, Oxford, United Kingdom

**HAWC:**

IFSC, Instituto de Física de São Carlos, Universidade de São Paulo, São Carlos, Brazil  
National Institute for Nuclear Physics, Padova Division, Italy  
BUAP, Benemérita Universidad Autónoma de Puebla, Facultad de Ciencias Físico Matemáticas, Puebla, Mexico  
CINVESTAV, Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City, Mexico  
INAOE, Instituto Nacional de Astrofísica Óptica y Electrónica, Puebla, Mexico  
CIC-IPN, Centro de Investigación en Computación, Instituto Politécnico Nacional, Mexico City, Mexico  
Departamento de Física, Centro Universitario de Ciencias Exactas e Ingenierías, Universidad de Guadalajara, Guadalajara, Jalisco, Mexico  
Universidad Autónoma de Chiapas, Tuxtla Gutiérrez, Chiapas, Mexico  
Universidad Autónoma del Estado de Hidalgo, Pachuca, Hidalgo, Mexico  
IA-UNAM, Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico  
ICN-UNAM, Instituto de Ciencias Nucleares, Universidad Nacional Autónoma de México, Mexico City, Mexico  
IF-UNAM, Instituto de Física, Universidad Nacional Autónoma de México, Mexico City, Mexico  
IGEF-UNAM, Instituto de Geofísica, Universidad Nacional Autónoma de México, Mexico City, Mexico  
Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, Mexico  
Universidad Politécnica de Pachuca, Hidalgo, Mexico  
IFJ-PAN, Instytut Fizyki Jadrowej im Henryka Niewodniczanskiego Polskiej Akademii Nauk, Krakow, Poland  
Department of Physics & Astronomy, George Mason University, Fairfax- VA, United States of America A  
School of Physics and Center for Relativistic Astrophysics, Georgia Institute of Technology, Atlanta-GA, United States of America

LNL, Los Alamos National Laboratory, Los Alamos-NM, United States of America  
Department of Physics & Astronomy, Michigan State University, East Lansing-MI, United States of America  
Department of Physics, Michigan Technological University, Houghton-MI, United States of America  
NASA/Goddard Space Flight Center, Greenbelt-MD, United States of America  
NASA/Marshall Space Flight Center, Huntsville-AL, United States of America  
Department of Physics, Pennsylvania State University, University Park-PA, United States of America  
Kavli Institute for Particle Astrophysics and Cosmology, Department of Physics and SLAC National Accelerator Laboratory, Stanford University, Menlo Park-CA, United States of America  
Department of Physics & Astronomy, University of California, Irvine, Irvine-CA, United States of America  
Department of Physics, University of Maryland, College Park-MD, United States of America  
Department of Physics & Astronomy, University of New Hampshire, Durham-NH, Unites States of America  
Department of Physics & Astronomy, University of New Mexico, Albuquerque-NM, United States of America  
Department of Physics & Astronomy, University of Rochester, Rochester-NY, United States of America  
Department of Physics & Astronomy, University of Utah, Salt Lake City-UT, United States of America  
WIPAC, Wisconsin IceCube Particle Astrophysics Center and University of Wisconsin-Madison, Madison-WI, United States of America

**High performance electron beam ion traps and sources:**

Michigan State University, USA  
TRIUMF, Vancouver, Canada  
Fudan University, Shanghai, China

**High repetition rates XUV table top sources:**

Lund University, Sweden  
VENTEON - Laser Quantum Company, Hannover, Germany  
Leibniz Universität Hannover, Germany  
Universität Heidelberg, Germany

**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

**Investigations of interaction processes between ionizing radiation and matter using reaction microscopes:**

Physikalisch Technische Bundesanstalt (PTB) Braunschweig, Germany

**Invisibles EU FP7 ITN:**

Universidad Autonoma de Madrid, Spain  
University of Durham, UK  
Aarhus Universitet, Danemark  
CNRS, France  
University of 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  
MilanoBicocca University, Italy

Napoli University, Italy  
Padova University, Italy  
Roma Tor Vergata University, Italy  
Torino University, Italy  
Laboratori Nazionali del Gran Sasso, Italy  
Astroparticle Group at the Trondheim University, Norway  
INR, Russia  
RRC Kurchatov Laboratory, Russia  
Nova Gorica University, Slovenia  
IFIC/CSIC-Valencia University, Spain  
Santiago de Compostela University, Spain  
Theor. Phys. Department at the Universidad Autonoma de Madrid, Spain  
Cops Group at the Phys. Dept. of the Stockholm University, Sweden  
Oxford University, United Kingdom

**ISOLTRAP:**

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

**Laser-induced electron diffraction (LIED) coincidence measurements with reaction microscopes:**

ICFO Barcelona, Spain

**LaSpec:**

Katholieke Universiteit Leuven Heverlee, Belgium  
University of Jyväskylä, Finland  
CNRS Orsay, France  
GSI Darmstadt, Germany  
Universität München, Germany  
Universität Mainz, Germany  
Universität Tübingen, Germany  
CERN Geneva, Switzerland  
University of Manchester, UK  
Lawrence Livermore National Laboratory, USA  
Pacific Northwest National Laboratory Richland, USA

**LEGEND:**

European Commission, Joint Research Centre, Directorate for Nuclear Safety & Security, Geel, Belgium  
Czech Technical University, Institute of Experimental and Applied Physics, Prague, Czech Republic  
Leibniz Institute for Crystal Growth, Berlin, Germany  
Max-Planck-Institut für Physik, München, Germany  
Physik Department, Technische Universität, München, Germany  
Technische Universität Dortmund, Dortmund, Germany  
University Tübingen, Tübingen, Germany  
Technische Universität Dresden, Dresden, Germany  
Department of Physical and Chemical Sciences University of L'Aquila, L'Aquila, Italy  
Istituto Nazionale di Fisica Nucleare, Laboratori Nazionali del Gran Sasso, Assergi, AQ, Italy  
Dipartimento di Fisica e Astronomia dell'Università di Padova, Italy  
Padova Istituto Nazionale di Fisica Nucleare, Padova, Italy  
Istituto Nazionale di Fisica Nucleare, Milano Biocca, Milano, Italy  
Roma Tre University and INFN Roma Tre, Rome, Italy  
Milano Univ. and Milano Istituto Nazionale di Fisica Nucleare, Milano, Italy  
College of Physical Science and Technology, Sichuan University, Chengdu, People's Republic of China  
Key Laboratory of Particle and Radiation Imaging, Ministry of Education and Department of Engineering Physics, Tsinghua University, Beijing, People's Republic of China  
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National Research Centre "Kurchatov Institute", Moscow, Russia  
Institute for Nuclear Research of the Russian Academy of Sciences, Moscow, Russia  
National Research Nuclear University MEPhI, Moscow Engineering Physics Institute, Moscow, Russia  
Joint Institute for Nuclear Research, Dubna, Russia  
Department of Nuclear Physics and Biophysics, Comenius University, Bratislava, Slovakia

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University College London, London, United Kingdom  
Department of Physics, Lancaster University, Lancaster, United Kingdom  
University of Liverpool, Liverpool, United Kingdom  
Department of Physics, Engineering Physics & Astronomy, Queen's University, Kingston, United Kingdom  
Los Alamos National Laboratory, Los Alamos-NM, United States of America  
Department of Physics and Astronomy, University of Tennessee, Knoxville-TN, United States of America  
Institute for Nuclear and Particle Astrophysics and Nuclear Science Division, Lawrence Berkeley National Laboratory, Berkeley-CA, United States of America  
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Triangle Universities Nuclear Laboratory, Durham-NC, United States of America  
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Department of Physics and Astronomy, University of North Carolina, Chapel Hill-NC, United States of America  
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Department of Physics, University of California, Berkeley-CA, United States of America  
Department of Physics, University of Texas at Austin, Austin-TX, United States of America  
Tennessee Tech University, Cookeville-TN, United States of America  
Department of Physics, Massachusetts Institute of Technology, Cambridge-MA, United States of America  
South Dakota School of Mines and Technology, Rapid City-SD, United States of America  
Department of Physics, North Carolina State University, Raleigh-NC, United States of America  
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**LHCb:**

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School of Physics and Astronomy, Monash University, Melbourne, Australia  
Centro Brasileiro de Pesquisas Físicas, CBPF, Rio de Janeiro, Brazil  
Universidade Federal do Rio de Janeiro, UFRJ, Rio de Janeiro, Brazil  
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Center for High Energy Physics, Tsinghua University, Beijing, China  
School of Physics State Key Laboratory of Nuclear Physics and Technology, Peking University, Beijing, China  
University of Chinese Academy of Sciences, Beijing, China  
Institute Of High Energy Physics, IHEP, Beijing, China  
South China Normal University, Guangzhou, China  
School of Physics and Technology, Wuhan University, Wuhan, China  
Institute of Particle Physics, Central China Normal University, Wuhan, Hubei, China  
Departamento de Física, Universidad Nacional de Colombia, Bogota, Colombia  
LAPP, Université de Savoie, CNRS/IN2P3, Annecy-Le-Vieux, France  
Clermont Université, Université Blaise Pascal, CNRS/IN2P3, LPC, Clermont-Ferrand, France  
CPPM, Aix-Marseille Université, CNRS/IN2P3, Marseille, France  
LAL, Université Paris-Sud, CNRS/IN2P3, Orsay, France  
LPNHE, Université Pierre et Marie Curie, Université Paris Diderot, CNRS/IN2P3, Paris, France  
Fakultät Physik, Technische Universität Dortmund, Dortmund, Germany  
Physikalisches Institut, Ruprecht-Karls-Universität Heidelberg, Heidelberg, Germany  
Institut für Physik, Universität Rostock, Rostock, Germany  
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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  
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Institute of Nuclear Physics, Moscow State University, SINP MSU, Moscow, Russia  
Institute for Nuclear Research of the Russian Academy of Sciences, INR RAN, Moscow, Russia  
National Research Centre Kurchatov Institute, Moscow, Russia  
Budker Institute of Nuclear Physics, SB RAS and Novosibirsk State University, Novosibirsk, Russia  
Institute for High Energy Physics, IHEP NRC KI, Protvino, Russia  
Yandex School of Data Analysis, Moscow, Russia  
National University of Science and Technology "MISIS", Moscow, Russia  
National Research University Higher School of Economics, Moscow, Russia  
National Research Tomsk Polytechnic University, Tomsk, Russia  
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ICCUB, Universitat de Barcelona, Barcelona, Spain  
IGFAE, Universidad de Santiago de Compostela, Santiago de Compostela, Spain  
Instituto de Fisica Corpuscular, IFIC, Universitat de Valencia-CSIC, Valencia, Spain  
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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  
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Institute for Nuclear Research of the National Academy of Sciences, KINR, Kyiv, Ukraine  
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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  
University of Michigan, Ann Arbor, United States  
Massachusetts Institute of Technology, Cambridge, MA, United States  
University of Cincinnati, Cincinnati, OH, United States  
University of Maryland, College Park, MD, United States  
Los Alamos National Laboratory, LANL, Los Alamos, United States  
Syracuse University, Syracuse, NY, United States

**Looking inside the molecular breakup with XUV-pump–XUV-probe transient-absorption spectroscopy:**

FLASH/DESY, Hamburg, Germany  
Department of Chemistry, UC Berkeley, Berkeley CA, USA  
Nanyang Technological University, Singapore  
ETH Zürich, Switzerland  
Theoretische Chemie, Universität Heidelberg, Germany

**Low Energy Storage Rings:**

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

**MATS:**

University of Brussels, Belgium  
University of Jyväskylä, Finland  
CNRS Orsay/Paris, France  
CENBG/IN2P3, Orsay, France  
Universität Greifswald, Germany  
Universität Erlangen, Germany  
GSI Darmstadt, Germany  
Universität Mainz, Germany  
Universität Gießen, Germany  
Universität München, Germany  
Variable Energy Cyclotron Centre Kolkata, India

Raniganj Girls' College, India  
St. Petersburg Nuclear Physics Institute, Russia  
St. Petersburg State University, Russia  
Universidad de Huelva, Spain  
University of Granada, Spain  
University of Valencia CSIC, Spain  
CIEMAT, Spain  
UPC, Spain  
Stockholm University, Sweden  
CERN Geneva, Switzerland  
Lawrence Livermore National Laboratory, USA  
Michigan State University, USA  
Louisiana State University, USA

**Molecular AttoClock:**

Kansas State University Manhattan, KS, USA

**Nuclear experiments in storage rings:**

Centre Etudes Nucleaires de Bordeaux Gradignan, France

**nuClock:**

Technische Universität Wien, Austria  
Physikalisch-Technische Bundesanstalt, Braunschweig, Germany  
Ludwig-Maximilians-Universität München, Germany  
MPI für Quantenoptik, Garching, Germany  
Ruprecht-Karls-Universität Heidelberg, Germany  
Jyväskylän Yliopisto, Jyväskylä, Finland  
Toptica Photonics AG, Gräfelfing, Germany

**NUSTAR:**

University of Leuven, Belgium  
Niels Bohr Institute Copenhagen, Denmark  
University of Jyväskylä, Finland  
IRES Strasbourg, France  
GANIL Caen, France  
CEA/Saclay Gif-sur-Yvette, France  
CSNSM 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

**Optical clocks:**

Wuhan Institute of Physics and Mathematics CAS, Wuhan, China  
RIKEN, Fundamental Symmetries Laboratory, Saitama, Japan

**Phase shifts due to continuum couplings:**

University of Central Florida, Florida, USA  
Drake University, Iowa, USA

**Photocathodes for Cold Intense Electron Beams:**

Rzhanov Institute of Semiconductor Physics, RAS, Novosibirsk, Russia

**Pulsar wind hydrodynamics:**

MEPhI, Moscow, Russia  
Rikkyo University, Tokyo, Japan

**Pulsar Wind Nebulae (German Israeli Foundation):**

Ben Gurion University, Beer Sheba, Israel

**Radiative Emission from Trapped Polyatomic Molecules:**

Max-Planck-Institut für Astronomie, Germany  
Karlsruhe Institute of Technology, Germany

**SFB Isolated quantum systems and universality in extreme conditions:**

Heidelberg University, Germany

**SHIPTRAP:**

GSI Darmstadt, Germany  
TU Darmstadt, Germany  
Helmholtz-Institut Mainz, Germany  
Universität Mainz, Germany  
Universität Greifswald, Germany  
Universität Gießen, Germany  
St. Petersburg Nuclear Physics Institute Gatchina, Russia  
LMU München, Germany  
Universidad Granada, Spain

**Signatures and control of strong-field dynamics:**

Physikalisch-Chemisches Institut, Universität Heidelberg, Germany

**SPARC:**

Centro Atomico Bariloche, Argentina  
TU Wien, Austria  
TRIUMF National Laboratory Vancouver, Canada  
University of Manitoba Winnipeg, Canada  
York University Toronto, Canada  
Institute of Modern Physics, Chinese Academy of Sciences, China  
China Institute of Atomic Energy Beijing, China  
Institute of Applied Physics and Computational Mathematics Beijing, China  
Fudan University Shanghai, China  
Institute of Modern Physics Lanzhou, China  
Jilin University, China  
Lanzhou University, China  
University of Science and Technology of China Hefei, China  
Wuhan Institute of Physics and Mathematics, China  
Northwest Normal University Lanzhou, China  
Ruder Boskovic Institute Zagreb, Croatia  
Institute of Physics, Czech Academy of Sciences, Czech Republic  
University of Aarhus, Denmark  
Cairo University Beni-Suef, Egypt  
Institut des NanoSciences de Paris, France

Laboratoire Kastler-Brossel Paris, UPMC/ENS, France  
CIMAP Caen, France  
CIRIL-Ganil Caen, France  
Ecole Normale Supérieure Lyon, France  
Institut de Physique Nucléaire de Lyon, France  
Groupe de Physique des Solides Paris, France  
Deutsches Elektronen-Synchroton DESY, Germany  
Humboldt-Universität Berlin, Germany  
Hahn-Meitner-Institut Berlin, Germany  
Universität Jena, Germany  
Universität Greifswald, Germany  
Forschungszentrum Jülich, Germany  
Universität Freiburg, Germany  
GSI Darmstadt, Germany  
Universität Gießen, Germany  
TU München, Germany  
LMU München, Germany  
TU Dresden, Germany  
Universität Tübingen, Germany  
Universität Frankfurt am Main, Germany  
Universität Mainz, Germany  
Universität Kassel, Germany  
TU Clausthal, (Germany  
Universität Heidelberg, Germany  
TU Darmstadt, Germany  
PTB Braunschweig, Germany  
Universität Erlangen, Germany  
University of Crete and IESL-FORTH Heraklion, Greece  
Institute of Nuclear Research Debrecen, Hungary  
Tata Institute of Fundamental Research Mumbai, India  
Vaish College Rohtak, India  
Nuclear Science Centre New Delhi, India  
Bhabha Atomic Research Centre Mumbai, India  
INFN Catania, Italy  
University of Tokyo, Japan  
RIKEN Wako, Japan  
Hashemite University Zarqa, Jordan  
Universidad Nacional Autónoma de México Cuernavaca, Mexico  
Reijksuniversiteit Groningen, The Netherlands  
B Z University Multan, Pakistan  
Instituto Peruano de Energía Nuclear, Peru  
Swietokrzyska Academy Kielce, Poland  
Jagiellonian 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 – INFIPR, Romania  
National Institute for Physics and Nuclear Engineering Bucharest, Romania  
RRC “Kurchatov Institute”, Russia  
Petersburg Nuclear Physics Institute, Russia  
Lebedev Physical Institute Moscow, Russia  
St. Petersburg State University, Russia  
Institute of Metrology for Time and Space Mendelevoo, Russia  
Institute of Spectroscopy of the RAS Troitsk, Russia  
Moscow State University, Russia  
V.G. Khlopin Radium Institute St. Petersburg, Russia  
Institute of Physics Belgrade, Serbia and Montenegro  
UNED – Universidad a Distancia, Spain  
CIMAT, Spain  
Hospital Universitario La Paz, Spain  
University of Madrid, Spain  
CSIC Madrid, Spain  
Chalmers University of Technology and Göteborg University, Sweden  
Stockholm University, Sweden

Mid-Sweden University Sundsvall, Sweden  
Lund University, Sweden  
Manne Siegbahn Laboratory Stockholm, Sweden  
CERN Geneva, Switzerland  
University of Fribourg, Switzerland  
Universität Basel, Switzerland  
Queen's University Belfast, UK  
University of Durham, UK  
Old Dominion University, USA  
East Carolina University, USA  
Lawrence Livermore National Laboratory, USA  
Kansas State University, USA  
Lawrence Berkeley National Laboratory, USA  
Georgia State University Atlanta, USA  
University of Missouri Rolla, USA  
Oak Ridge National Laboratory, USA  
Western Michigan University Kalamazoo, USA  
Harvard-Smithsonian Center for Astrophysics Cambridge, USA  
Brown University Providence, USA  
University of Texas Austin, USA  
Columbia University New York, USA  
Heat Physics Department of the Uzbek Academy of Sciences, Uzbekistan

**Spectroscopy of highly charged ions for EUV nanolithography:**

Advanced Research Center for Nanolithography, EUV Plasma Processes, Amsterdam, The Netherlands

**Spectroscopy of pure and doped He-droplets:**

University of Freiburg, Germany  
Aarhus University, Denmark  
IITM Madras, India

**Stereo:**

IRFU, CEA, Université Paris-Saclay, Gif-sur-Yvette, France  
Institut Laue-Langevin, Grenoble, France  
Univ. Grenoble Alpes, Université Savoie Mont Blanc, CNRS/IN2P3, LAPP, Annecy, France  
Univ. Grenoble Alpes, CNRS, Grenoble INP, LPSC-IN2P3, Grenoble, France

**SWGO:**

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DPC-CAB, Grupo Atómico Bariloche, Argentina  
Facultad de Ciencias Exactas - Universidad Nacional de Salta, Argentina  
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IFSC, Instituto de Física de São Carlos, Universidade de São Paulo, São Carlos, Brazil  
IFF, Instituto Federal de Educação, Ciência e Tecnologia Fluminense, Rio de Janeiro, Brazil  
FZU, Institute of Physics of the Czech Academy of Sciences, Prague, Czech Republic  
ECAP, Erlangen Centre for Astroparticle Physics - Universität Erlangen-Nürnberg, Erlangen, Germany  
RWTH, Aachen, Germany  
Dipartimento di Fisica, Università degli studi di Torino, Italy  
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Dipartimento di Física, Università di Trieste, Italy  
Politecnico di Milano, Italy  
Università IUAV di Venezia, Italy  
Università degli Studi di Roma "Tor Vergata" - Dipartimento di Fisica, Italy  
Università di Udine, Italy  
Università di Perugia, Italy  
Università di Siena, Italy  
Dipartimento Interateneo di Física dell'Università e del Politecnico di Bari, Italy  
INAF, Instituto Nazionale di Astrofísica, Italy  
IF-UNAM, Instituto de Física, Universidad Nacional Autónoma de México, Mexico City, Mexico  
IA-UNAM, Instituto de Astronomía, Mexico City, Mexico  
ICN-UNAM, Instituto de Ciencias Nucleares, Mexico City, Mexico  
IGEF-UNAM, Instituto de Geofísica, Mexico City, Mexico  
INAOE, Instituto Nacional de Astrofísica Óptica y Electrónica, Puebla, Mexico  
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Centro de Investigación en Computación, Instituto Politécnico Nacional, Mexico  
UAEH, Universidad Autónoma del Estado de Hidalgo, Mexico  
UPP, Universidad Politécnica de Pachuca, Mexico  
LIP, Laboratório de Instrumentação e Física Experimental de Partículas, Lisboa, Portugal  
Durham University, Durham, United Kingdom  
University Leicester, United Kingdom  
University Liverpool, United Kingdom  
University of Oxford, United Kingdom  
Michigan Technological University, Houghton-MI, United States of America  
LNL, Los Alamos National Lab, Los Alamos-NM, United States of America  
UMD, University of Maryland, College Park,-MD, United States of America  
WIPAC, Wisconsin IceCube Particle Astrophysics Center, UW-Madison, United States of America

**Time-resolved Four-Wave-Mixing Spectroscopy for Inner-Valence Transitions:**

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**VHE Gamma-Ray Sources:**

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SUBATECH, France  
LPNHE, France  
LAL, France  
University of Torino and INFN-Torino, Italy  
University of Napoli and INFN-Napoli, Italy  
Weizmann Institute of Science, Israel  
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Rensselaer Polytechnic Institute, USA  
University of Chicago, USA  
University of California, San Diego, USA  
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**X-ray laboratory astrophysics with free-electron lasers and synchrotron radiation:**

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IRAP Research Institute in Astrophysics and Planetology, Toulouse, France  
RIKEN Nishina Center, High Energy Astrophysics Laboratory, Saitama, Japan  
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