

## Atomic Physics Division Fachverband Atomphysik (A)

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### Overview of Invited Talks and Sessions

(lecture rooms BAR 205, BAR 106, HSZ 01, HSZ 02, SCH A118, and SCH 251; Poster P1 and P2)

#### Invited Talks

A 1.1	Mon	10:30–11:00	BAR 205	<b>First results from multi-coincidence experiments at LCLS</b> — •DANIEL ROLLES, BENEDIKT RUDEK, ARTEM RUDENKO, BENJAMIN ERK, LUTZ FOU-CAR, SASCHA EPP, ILME SCHLICHTING, LOTHAR STRÜDER, JOACHIM ULL-RICH, THE CAMP COLLABORATION
A 1.2	Mon	11:00–11:30	BAR 205	<b>X-FEL induced multi-photon processes</b> — •BERTOLD KRÄSSIG
A 1.3	Mon	11:30–12:00	BAR 205	<b>X-ray femtochemistry: Mapping the electronic structure of molecules during chemical reactions with x-ray spectroscopy</b> — •PHILIPPE WERNET
A 5.1	Mon	14:00–14:30	BAR 106	<b>New insights in molecular photoionization physics - Coherence prop-erties of the valence photoionization of N<sub>2</sub> and O<sub>2</sub></b> — •JENS VIEFHAUS, MARKUS ILCHEN, SASCHA DEINERT, LEIF GLASER, FRANK SCHOLZ, PE-TER WALTER, MARKUS BRAUNE, ANDRÉ MEISSNER, LOKESH TRIBEDI, UWE BECKER
A 5.2	Mon	14:30–15:00	BAR 106	<b>Appearance of coherent localization due to the Auger Doppler effect</b> — •BURKHARD LANGER, RAINER HENTGES, OLIVER KUGELER, MARKUS BRAUNE, SANJA KORICA, JENS VIEFHAUS, DANIEL ROLLES, UWE HERGENHAHN, HIRONOBU FUKUZAWA, XIAOJING LIU, YUSUKE TAMENORI, MASAMITSU HOSHINO, HIROSHI TANAKA, CHRISTOPHE NICOLAS, CATALIN MIRON, OMAR AL-DOSSARY, KIYOSHI UEDA, UWE BECKER
A 8.1	Mon	16:30–17:00	BAR 106	<b>Ultrafast Electron and Nuclear Dynamics in Dissociative Ionization of H<sub>2</sub>/D<sub>2</sub> probed by Molecular Frame Photoemission.</b> — •DANIELLE DOWEK
A 8.2	Mon	17:00–17:30	BAR 106	<b>High-resolution soft X-ray spectroscopies of isolated species</b> — VIC-TOR KIMBERG, ANDREAS LINDBLAD, XIAO-JING LIU, CHRISTOPHE NICO-LAS, EMMANUEL ROBERT, JOHAN SÖDRESTRÖM, OKSANA TRAVNIKOVA, •CATALIN MIRON
A 8.3	Mon	17:30–18:00	BAR 106	<b>Double Photoionization of Aromatic Hydrocarbons</b> — •RALF WEHLITZ
A 9.1	Tue	10:30–11:00	BAR 205	<b>Ultraintense X-Ray Induced Multiple Ionization and Double Core-Hole Production in Molecules</b> — •NORA BERRAH, MATS LARSSON, RAY-MOND FEIFEL, KIYOSHI UEDA, KEVIN PRINCE
A 9.2	Tue	11:00–11:30	BAR 205	<b>Experiments at SPring-8 FEL: from EUV to X rays</b> — •KIYOSHI UEDA
A 9.3	Tue	11:30–12:00	BAR 205	<b>Coupling dependence regarding the Cooper minima positions in two-photon ionization of rare gases</b> — •MARKUS BRAUNE, TORALF LISCHKE, ANDE MEISSNER, MARKUS ILCHEN, SASCHA DEINERT, JENS VIEFHAUS, AN-DRE KNIE, UWE BECKER
A 12.1	Tue	14:00–14:30	BAR 106	<b>Dissociative charge transfer into molecular ions</b> — •LOTHAR PH. H. SCHMIDT, REINHARD DÖRNER, HORST SCHMIDT-BÖCKING
A 14.1	Fri	10:30–11:00	BAR 106	<b>Synchrotron radiation spectroscopy of ions</b> — •ALFRED MÜLLER
A 14.2	Fri	11:00–11:30	BAR 106	<b>Doppler effect in fragment autoionization following core-to-valence excitation in molecular oxygen.</b> — •MARC SIMON, RENAUD GUILLEMIN, EIJI SHIGEMASA

A 15.1	Wed	10:30–11:00	BAR 106	<b>Ultracold chemistry and dipolar collisions in a quantum gas of polar molecules</b> — ●SILKE OSPELKAUS, AMODSEN CHOTIA, MARCIO DE MIRANDA, BRIAN NEYENHUIS, KANG-KUEN NI, DAJUN WANG, JUN YE, DEBORAH JIN
A 19.1	Thu	10:30–11:00	BAR 205	<b>Cluster ionization in strong laser fields - NIR vs. XUV</b> — ●THOMAS FENNEL, JÖRG KÖHN, CHRISTIAN PELTZ, MATHIAS ARBEITER
A 22.1	Thu	14:00–14:30	BAR 106	<b>Influence of two-center electronic correlations on atomic processes</b> — ●CARSTEN MÜLLER, ALEXANDER B. VOITKIV, BENNACEUR NAJJARI, JOSE R. CRESPO LOPEZ-URRUTIA, ZOLTAN HARMAN
A 25.1	Thu	16:30–17:00	BAR 106	<b>Conical intersections in an ultracold gas</b> — ●SEBASTIAN WÜSTER, ALEXANDER EISFELD, JAN-MICHAEL ROST
A 27.1	Fri	10:30–11:00	BAR 205	<b>Plasmon Driven Higher Harmonics Generation</b> — IN-YONG PARK, SEUNGCHUL KIM, JOON-HEE CHOI, ●SEUNG-WOO KIM
A 27.2	Fri	11:00–11:30	BAR 205	<b>Structure and Dynamics of Free Nanoparticles: From Charging to Time-Resolved Photoemission</b> — ●ECKART RÜHL
A 27.3	Fri	11:30–12:00	BAR 205	<b>Terahertz Nano Plasmonics</b> — ●DAI-SIK KIM
A 27.4	Fri	12:00–12:30	BAR 205	<b>Coulomb complexes: Electron emission from clusters in strong FEL pulses</b> — ●ULF SAALMANN
A 27.5	Fri	12:30–13:00	BAR 205	<b>Appearance of Surface and Volume Plasmons in Fullerenes</b> — ●SANJA KORICA, AXEL REINKÖSTER, MARKUS BRAUNE, JENS VIEFHAUS, DANIEL ROLLES, G. FRONZONI, D. TOFFOLI, M. STENER, P. DECLEVA, O. ALDOSSARY, BURKHARD LANGER, UWE BECKER
A 28.1	Wed	10:30–11:00	BAR 205	<b>Quantum Interference Control of Free and Bound Electrons in Atoms and Molecules</b> — ●THOMAS PFEIFER

### Invited Talks of the Joint Symposium The Concept of Reality in Physics (SYRP)

See SYRP for the full program of the symposium.

SYRP 1.1	Wed	14:30–15:00	HSZ 01	<b>What is realism in physics? What is the price for maintaining it?</b> — ●ANTHONY J. LEGGETT
SYRP 1.2	Wed	15:00–15:30	HSZ 01	<b>Testing concepts of reality with entangled photons in the laboratory and outside</b> — ●ANTON ZEILINGER
SYRP 1.3	Wed	15:30–16:00	HSZ 01	<b>Special relativity and quantum entanglement: How compatible are they?</b> — ●TIM MAUDLIN
SYRP 2.1	Wed	16:30–17:00	HSZ 01	<b>What can we learn from Bell's inequalities violations: the answers of Einstein and Feynman</b> — ●ALAIN ASPECT
SYRP 2.2	Wed	17:00–17:30	HSZ 01	<b>Physics and Narrative</b> — ●DAVID ALBERT
SYRP 2.3	Wed	17:30–18:00	HSZ 01	<b>The relativity of inertia and reality of nothing</b> — ●ALEXANDER AFRIAT
SYRP 2.4	Wed	18:00–18:30	HSZ 01	<b>Obtaining Information about and Controlling Quantum Particles: Quantum Engineering</b> — ●DIETER MESCHEDÉ

### Invited Talks of the Joint Symposium Cultural Heritage in the Light of Physical Methods (SYCH)

See SYCH for the full program of the symposium.

SYCH 1.1	Thu	14:00–14:30	HSZ 02	<b>Radiocarbon dating of cultural objects: Limit</b> — ●HANS-ARNO SYNAL
SYCH 1.2	Thu	14:30–15:00	HSZ 02	<b>From Lascaux to Rembrandt. Insights into invisible traces of paintings and drawings from physical methods</b> — ●INA REICHE
SYCH 1.3	Thu	15:00–15:30	HSZ 02	<b>IPANEMA, A European research platform for the study of ancient and historical materials</b> — ●LOÏC BERTRAND
SYCH 1.4	Thu	15:30–16:00	HSZ 02	<b>3D X-ray view of treasures</b> — ●BIRGIT KANNGIESSER, IOANNA MANTOUVALOU, WOLFGANG MALZER
SYCH 2.1	Thu	16:30–17:00	HSZ 02	<b>Looking below the surface of paintings by help of neutrons</b> — ●CLAUDIA LAURENZE-LANDSBERG, CARL OTTO FISCHER
SYCH 2.2	Thu	17:00–17:30	HSZ 02	<b>X-ray fluorescence analysis using synchrotron radiation excitation</b> — ●MARTIN RADTKE, GÜNTER BUZANICH, UWE REINHOLZ, HEINRICH RIESEMEIER
SYCH 2.3	Thu	17:30–18:00	HSZ 02	<b>Metabolic tools to study wine body</b> — ●OLIVER FIEHN, KIRSTEN SKOGERSON, GERT WOHLGEMUTH

SYCH 2.4 Thu 18:00–18:30 HSZ 02 **Identification of Ancient Plant Textiles** — •BODIL HOLST, BRIDGET MURPHY

## Sessions

A 1.1–1.7	Mon	10:30–13:00	BAR 205	<b>Interaction with VUV and X-ray light (FEL) I</b>
A 2.1–2.9	Mon	10:30–12:45	BAR 106	<b>Ultra-cold atoms, ions and BEC I (with Q)</b>
A 3.1–3.10	Mon	10:30–13:00	SCH 251	<b>Ultracold Atoms: Manipulation and Detection (with Q)</b>
A 4.1–4.8	Mon	14:00–16:00	BAR 205	<b>Precision spectroscopy of atoms and ions I</b>
A 5.1–5.6	Mon	14:00–16:00	BAR 106	<b>Photoionization I</b>
A 6.1–6.8	Mon	16:30–18:30	BAR 205	<b>Precision spectroscopy of atoms and ions II</b>
A 7.1–7.13	Mon	16:00–18:30	P1	<b>Poster I</b>
A 8.1–8.5	Mon	16:30–18:30	BAR 106	<b>Photoionization II</b>
A 9.1–9.7	Tue	10:30–13:00	BAR 205	<b>Interaction with VUV and X-ray light (FEL) II</b>
A 10.1–10.9	Tue	10:30–12:45	BAR 106	<b>Ultra-cold atoms, ions and BEC II (with Q)</b>
A 11.1–11.6	Tue	14:00–15:30	BAR 205	<b>Precision spectroscopy of atoms and ions III</b>
A 12.1–12.5	Tue	14:00–15:30	BAR 106	<b>Interaction of matter with ions I</b>
A 13.1–13.14	Tue	18:00–20:00	P1	<b>Poster II</b>
A 14.1–14.7	Fri	10:30–12:45	BAR 106	<b>Interaction with VUV and X-ray light III</b>
A 15.1–15.8	Wed	10:30–12:45	BAR 106	<b>Ultra-cold atoms, ions and BEC III (with Q)</b>
A 16.1–16.8	Wed	14:00–16:00	BAR 106	<b>Atomic systems in external fields I</b>
A 17.1–17.6	Wed	16:30–18:00	BAR 205	<b>Ultra-cold atoms, ions and BEC IV (with Q)</b>
A 18.1–18.8	Wed	16:30–18:30	BAR 106	<b>Interaction with strong or short laser pulses I</b>
A 19.1–19.9	Thu	10:30–13:00	BAR 205	<b>Atomic clusters I</b>
A 20.1–20.10	Thu	10:30–13:00	BAR 106	<b>Ultra-cold atoms, ions and BEC V (with Q)</b>
A 21.1–21.8	Thu	14:00–16:00	BAR 205	<b>Atomic systems in external fields II</b>
A 22.1–22.7	Thu	14:00–16:00	BAR 106	<b>Electron scattering and recombination I</b>
A 23.1–23.6	Thu	14:30–16:00	SCH A118	<b>Ultracold Atoms: Trapping and Cooling 1 (with Q)</b>
A 24.1–24.8	Thu	16:30–18:30	BAR 205	<b>Attosecond physics I</b>
A 25.1–25.7	Thu	16:30–18:30	BAR 106	<b>Ultra-cold plasmas and Rydberg systems I</b>
A 26.1–26.81	Thu	16:00–18:30	P2	<b>Poster III</b>
A 27.1–27.5	Fri	10:30–13:00	BAR 205	<b>Nano Plasmonic (with HL)</b>
A 28.1–28.8	Wed	10:30–12:45	BAR 205	<b>Attosecond physics II</b>
A 29.1–29.10	Fri	10:30–13:00	HSZ 02	<b>Ultracold Atoms: Trapping and Cooling 2 (with Q)</b>

## Annual General Meeting of the Atomic Physics Division

Wednesday 13:30–14:00 BAR106

- Bericht / Report
- Wahl / Election
- Verschiedenes / Miscellaneous