

## Atomic Physics Division Fachverband Atomphysik (A)

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### Overview of Invited Talks and Sessions

(Lecture rooms f107, f142, f303, and f428; Poster Empore Lichthof)

#### Invited Talks

A 3.1	Mon	11:00–11:30	f303	<b>Interaction of atoms and ions with twisted light</b> — ●STEPHAN FRITZSCHE, DANIEL SEIPT, ANDREY SURZHYKOV
A 7.1	Mon	14:30–15:00	f107	<b>Probing QED in strong fields via the magnetic moment of highly charged ions</b> — ●SVEN STURM
A 7.4	Mon	15:30–16:00	f107	<b>X-ray emission from highly charged ions</b> — ●ANDREY SURZHYKOV, STEPHAN FRITZSCHE, ANDREY VOLOTKA, VLADIMIR YEROKHIN, THOMAS STÖHLKER
A 16.1	Tue	14:30–15:00	f142	<b>Observation of the Efimov state of the helium trimer</b> — ●MAKSIM KUNITSKI, STEFAN ZELLER, JÖRG VOIGTSBERGER, ANTON KALININ, LOTHAR PH. H. SCHMIDT, MARKUS SCHÖFFLER, ACHIM CZASCH, WIELAND SCHÖLLKOPF, ROBERT E. GRISENTI, TILL JAHNKE, DÖRTE BLUME, REINHARD DÖRNER
A 25.1	Wed	14:30–15:00	f107	<b>Describing the correlated electron dynamics in atoms and molecules</b> — ●SEBASTIAN BAUCH
A 27.1	Wed	14:30–15:00	f428	<b>Atomic level scheme of neutral actinium</b> — ●SEBASTIAN RAEDER, RANDOLF BEERWERTH, RAFAEL FERRER, CAMILO GRANADOS, AMIN HAKIMI, MUSTAPHA LAATAOUI, VOLKER SONNENSCHNEIN, NORBERT TRAUTMANN, KLAUS WENDT
A 33.1	Thu	11:00–11:30	f303	<b>Imaging single nanoparticles with intense XUV pulses from a high-order harmonic generation source</b> — ●D. RUPP, B. LANGBEHN, M. SAUPPE, N. MONSERUD, A. ULMER, J. ZIMMERMANN, T. MÖLLER, F. FRASSETTO, A. TRABATTONI, F. CALEGARI, M. VRAKING, A. ROUZEE
A 34.1	Thu	11:00–11:30	f428	<b>The magnetic moment of the antiproton</b> — ●STEFAN SELLNER, KLAUS BLAUM, MATTHIAS BORCHERT, TAKASHI HIGUCHI, NATHAN LEEFER, YASUYUKI MATSUDA, ANDREAS MOOSER, HIROKI NAGAHAMA, CHRISTIAN OSPELKAUS, WOLFGANG QUINT, GEORG SCHNEIDER, CHRISTIAN SMORRA, TOYA TANAKA, JOCHEN WALZ, YASUNORI YAMAZAKI, STEFAN ULMER
A 35.1	Thu	14:30–15:00	f107	<b>History and current status of the Keldysh theory</b> — ●SERGEY POPRUZHENKO
A 35.2	Thu	15:00–15:30	f107	<b>Multidimensional control of XUV-initiated high harmonic generation</b> — DORON AZOURY, ●MICHAEL KRÜGER, HENRIK R. LARSSON, SEBASTIAN BAUCH, DAVID J. TANNOR, BARRY D. BRUNER, NIRIT DUDOVICH
A 39.1	Fri	11:00–11:30	f303	<b>Enhanced ionization of embedded clusters by electron transfer mediated decay in helium nanodroplets</b> — ●A. C. LAFORGE, V. STUMPF, K. GOKHBERG, J. VON VANGEROW, N. V. KRYZHEVOI, P. O'KEEFFE, A. CIAVARDINI, S. KRISHNAN, K. C. PRINCE, R. RICHTER, R. MOSHAMMER, T. PFEIFER, L. S. CEDERBAUM, F. STIENKEMEIER, M. MUDRICH

#### Invited talks of the joint symposium SYAD

See SYAD for the full program of the symposium.

SYAD 1.1	Tue	11:00–11:30	e415	<b>Artificial gauge fields and topology with ultracold atoms in optical lattices</b> — ●MONIKA AIDELSBURGER
SYAD 1.2	Tue	11:30–12:00	e415	<b>Many-body physics with impurities in ultracold quantum gases</b> — ●FABIAN GRUSDT

SYAD 1.3	Tue	12:00–12:30	e415	<b>How to determine the handedness of single molecules</b> — •MARTIN PITZER
SYAD 1.4	Tue	12:30–13:00	e415	<b>Quantum systems under gravitational time dilation</b> — •MAGDALENA ZYCH

### Invited talks of the joint symposium SYUL

See SYUL for the full program of the symposium.

SYUL 1.1	Fri	11:00–11:50	e415	<b>Exawatt laser concepts for extreme field science</b> — •CHRIS BARTY
SYUL 1.2	Fri	11:50–12:20	e415	<b>Generation of short pulses with ultra-high temporal contrast at the PHELIX petawatt facility</b> — •VINCENT BAGNOUD
SYUL 1.3	Fri	12:20–12:50	e415	<b>Petawatt lasers for particle acceleration at HZDR Dresden</b> — •ULRICH SCHRAMM
SYUL 1.4	Fri	12:50–13:20	e415	<b>High-intensity few-cycle pulses with ultrahigh temporal contrast</b> — •STEFAN KARSCH, ALEXANDER KESSEL, CHRISTOPH SKROBOL, MATHIAS KRÜGER, CHRISTOPH WANDT, SANDRO KLINGEBIEL, OLGA LYSOV, IZHAR AHMAD, SERGEI TRUSHIN, VYACHESLAV LESHCHENKO, ZSUZSANNA MAJOR, FERENC KRAUSZ
SYUL 2.1	Fri	14:00–14:30	e415	<b>Coherent Combination of Ultrafast Fiber Lasers</b> — •JENS LIMPERT
SYUL 2.2	Fri	14:30–15:00	e415	<b>Cryogenic multipass amplifiers for high peak and average power ultrafast lasers</b> — •LUIS E. ZAPATA
SYUL 2.3	Fri	15:00–15:30	e415	<b>Multi-TW infrared laser using Frequency domain Optical Parametric Amplification</b> — •BRUNO E. SCHMIDT, PHILIPPE LASSONDE, GUILMOT ERNOTTE, MATHIEU GIGUERE, NICOLAS THIRE, ANTOINE LARAMEE, HEIDE IBRAHIM, FRANCOIS LEGARE

### Sessions

A 1.1–1.7	Mon	11:00–12:45	a310	<b>Precision Measurements and Metrology I (with Q)</b>
A 2.1–2.8	Mon	11:00–13:00	e001	<b>Ultracold Atoms, Ions and Molecules I (with Q)</b>
A 3.1–3.7	Mon	11:00–13:00	f303	<b>Atomic systems in external fields I</b>
A 4.1–4.5	Mon	11:00–12:15	f107	<b>Collisions, scattering and correlation phenomena I</b>
A 5.1–5.7	Mon	14:30–16:15	a310	<b>Precision Measurements and Metrology II (with Q)</b>
A 6.1–6.8	Mon	14:30–16:30	e001	<b>Ultracold Atoms, Ions and Molecules II (with Q)</b>
A 7.1–7.6	Mon	14:30–16:30	f107	<b>Highly charged ions and their applications</b>
A 8.1–8.7	Mon	14:30–16:15	f303	<b>Atomic systems in external fields II</b>
A 9.1–9.51	Mon	16:30–19:00	Empore Lichthof	<b>Ultra-cold atoms, ions and BEC (with Q)</b>
A 10.1–10.5	Mon	17:00–18:15	a310	<b>Precision Measurements and Metrology III (with Q)</b>
A 11.1–11.7	Mon	17:00–18:45	f107	<b>Atomic clusters I (with MO)</b>
A 12.1–12.7	Mon	17:00–18:45	f303	<b>Ultracold plasmas and Rydberg systems I (with Q)</b>
A 13.1–13.8	Tue	11:00–13:00	a310	<b>Precision Measurements and Metrology IV (with Q)</b>
A 14.1–14.9	Tue	11:00–13:15	f342	<b>Ultracold Atoms, Ions and Molecules III (with Q)</b>
A 15.1–15.8	Tue	14:30–16:30	f107	<b>Atomic clusters II (with MO)</b>
A 16.1–16.7	Tue	14:30–16:30	f142	<b>Collisions, scattering and correlation phenomena II</b>
A 17.1–17.8	Tue	14:30–16:30	f303	<b>Ultracold plasmas and Rydberg systems II (with Q)</b>
A 18.1–18.5	Tue	16:30–19:00	Empore Lichthof	<b>Highly charged ions and their applications</b>
A 19.1–19.5	Tue	16:30–19:00	Empore Lichthof	<b>Collisions, scattering and correlation phenomena</b>
A 20.1–20.9	Tue	16:30–19:00	Empore Lichthof	<b>Atomic systems in external fields</b>
A 21.1–21.15	Tue	16:30–19:00	Empore Lichthof	<b>Interaction with strong or short laser pulses</b>
A 22.1–22.19	Tue	16:30–19:00	Empore Lichthof	<b>Interaction with VUV and X-ray light</b>
A 23.1–23.8	Wed	11:00–13:00	f107	<b>Ultra-cold atoms, ions and BEC I (with Q)</b>
A 24.1–24.8	Wed	11:00–13:00	f303	<b>Interaction with strong or short laser pulses I</b>
A 25.1–25.7	Wed	14:30–16:30	f107	<b>Interaction with strong or short laser pulses II</b>
A 26.1–26.8	Wed	14:30–16:30	f303	<b>Ultra-cold atoms, ions and BEC II (with Q)</b>
A 27.1–27.7	Wed	14:30–16:30	f428	<b>Precision spectroscopy of atoms and ions I (with Q)</b>
A 28.1–28.10	Wed	16:30–19:00	Empore Lichthof	<b>Ultracold plasmas and Rydberg systems (with Q)</b>
A 29.1–29.6	Wed	16:30–19:00	Empore Lichthof	<b>Atomic clusters (with MO)</b>
A 30.1–30.24	Wed	16:30–19:00	Empore Lichthof	<b>Precision spectroscopy of atoms and ions (with Q)</b>
A 31.1–31.3	Wed	16:30–19:00	Empore Lichthof	<b>Attosecond physics</b>

A 32.1–32.8	Thu	11:00–13:00	f107	<b>Ultra-cold atoms, ions and BEC III (with Q)</b>
A 33.1–33.6	Thu	11:00–12:45	f303	<b>Interaction with strong or short laser pulses III</b>
A 34.1–34.7	Thu	11:00–13:00	f428	<b>Precision spectroscopy of atoms and ions II (with Q)</b>
A 35.1–35.6	Thu	14:30–16:30	f107	<b>Attosecond physics</b>
A 36.1–36.8	Thu	14:30–16:30	f303	<b>Ultra-cold atoms, ions and BEC IV (with Q)</b>
A 37.1–37.4	Fri	11:00–13:20	e415	<b>Advanced Concepts for High Peak Power Ultrafast Lasers I</b>
A 38.1–38.8	Fri	11:00–13:00	f107	<b>Ultra-cold atoms, ions and BEC V (with Q)</b>
A 39.1–39.8	Fri	11:00–13:15	f303	<b>Interaction with VUV and X-ray light</b>
A 40.1–40.7	Fri	11:00–12:45	f428	<b>Precision spectroscopy of atoms and ions III (with Q)</b>
A 41.1–41.3	Fri	14:00–15:30	e415	<b>Advanced Concepts for High Peak Power Ultrafast Lasers II</b>

## Annual General Meeting of the Atomic Physics Division

Thursday 13:15–14:00 f107