

Atomic Physics Division Fachverband Atomphysik (A)

Marc Vrakking
Max Born Institut für Nichtlineare Optik und Kurzzeit-Spektroskopie
Max Born Strasse 2A
12489 Berlin
marc.vrakking@mbi-berlin.de

Overview of Invited Talks and Sessions

(Lecture rooms N 1, N 2, N3, and HS 20; Poster P OGs)

Invited Talks

A 1.1	Mon	14:30–15:00	HS 20	Tunable entanglement resource in elastic electron-exchange collisions out of chaotic spin systems — •BERND LOHMANN, KARL BLUM, BURKHARD LANGER
A 2.1	Mon	14:30–15:00	N 1	Towards Atomtronic Interferometry — •WOLF VON KLITZING
A 3.1	Mon	14:30–15:00	N 2	Excited state molecular dynamics: new insights from x-ray spectroscopy and scattering — •MARKUS GÜHR
A 4.1	Mon	14:30–15:00	N 3	Bound-electron g factor of highly charged ions — •ANDREY VOLOTKA
A 6.1	Mon	17:00–17:30	HS 20	Phase-modulated harmonic light spectroscopy — •LUKAS BRUDER, ULRICH BANGERT, MARCEL BINZ, ANDREAS WITUSCHEK, MARCEL MUDRICH, FRANK STIENKEMEIER
A 6.2	Mon	17:30–18:00	HS 20	Amplitude and phase control of an atom's optical response — •ALEXANDER BLÄTTERMANN, ANDREAS KALDUN, VEIT STOOS, THOMAS DING, CHRISTIAN OTT, THOMAS PFEIFER
A 8.1	Mon	17:00–17:30	N 2	Angular resolved inner-shell photoionization spectra of randomly oriented and fixed-in-space methane and methyloxirane — •PHILIPP DEMEKHIN
A 8.2	Mon	17:30–18:00	N 2	Circular Dichroism in Multi-Photon Ionization of Oriented Helium Ions — •MARKUS ILCHEN, NICOLAS DOUGUET, TOMMASO MAZZA, KLAUS BARTSCHAT, ALEXEI GRUM-GRZHIMAILO, NIKOLAY KABACHNIK, MICHAEL MEYER
A 16.1	Tue	14:30–15:00	N 2	High-power XUV frequency combs — •CHRISTOPH M. HEYL, GIL PORAT, STEPHEN SCHOUN, CRAIG BENKO, NADINE DÖRRE, KRISTAN L. CORWIN, JUN YE
A 22.1	Wed	14:30–15:00	N 2	Electron correlation dynamics in weak and strong fields — •CHRISTIAN OTT
A 23.1	Wed	14:30–15:00	N 3	Surface-electrode traps for scalable quantum information processing with atomic ions — •C. OSPELKAUS, H. HAHN, M. WAHNSCHAFTE, G. ZARANTONELLO, T. DUBIELZIG, S. GRONDKOWSKI, J. MORGNER, M. KOHNEN, A. BAUTISTA-SALVADOR
A 34.1	Fri	11:00–11:30	N 2	3d-Photoelectron Momentum Distributions from Multi-Photon Ionization with Ultra Short Polarization-Shaped Laser Pulses — •MATTHIAS WOLLENHAUPT
A 35.1	Fri	11:00–11:30	N 3	The Nanoplasma Oscilloscope — •CHRISTIAN PELTZ, A. LAForge, B. LANGBEHN, R. MICHELIS, C. CALLEGARI, M. DI FRAIA, P. FINETTI, R. SQUIBB, C. SVETINA, L. RAIMONDI, M. MANFREDDA, N. MAHNE, P. PISERI, M. ZANGRANDO, L. GIANNESI, T. MÖLLER, R. FEIFEL, K. C. PRINCE, M. MUDRICH, D. RUPP, F. STIENKEMEIER, T. FENNEL
A 37.1	Fri	14:30–15:00	N 1	Sympathetic cooling of OH- by means of a heavy buffer gas — •HENRY LOPEZ, BASTIAN HÖLTKEMEIER, JONAS TAUCH, TOBIAS HELDT, ERIC ENDRES, ROLAND WESTER, MATTHIAS WEIDEMÜLLER
A 39.1	Fri	14:30–15:00	N 3	Experimental studies of Interatomic Coulombic Decay — •TILL JAHNKE

Invited talks of the joint symposium SYDD

See SYDD for the full program of the symposium.

SYDD 1.1	Mon	14:30–15:00	P 1	Controlling (?) Quantum Dynamics with Open Systems — •DIETER MESCHEDÉ
SYDD 1.2	Mon	15:00–15:30	P 1	Many-body physics of driven, open quantum systems: optically driven Rydberg gases — •MICHAEL FLEISCHHAUER
SYDD 1.3	Mon	15:30–16:00	P 1	Theorie getriebener dissipativer Quantensysteme / theory of driven dissipative quantum systems — •TOBIAS BRANDES
SYDD 1.4	Mon	16:00–16:30	P 1	Calorimetry of a Bose-Einstein-condensed photon gas — •MARTIN WEITZ

Invited talks of the joint symposium SYAP

See SYAP for the full program of the symposium.

SYAP 1.1	Tue	11:00–11:30	P 1	Electrons and ions meet ultracold atoms — •HERWIG OTT
SYAP 1.2	Tue	11:30–12:00	P 1	Interrogating strongly bound electrons about fundamental physics — •JOSÉ R. CRESO LÓPEZ-URRUTIA
SYAP 1.3	Tue	12:00–12:30	P 1	Strong-field effects in heavy-ion collisions — •ANDREY SURZHYKOV, VLADIMIR YEROKHIN, THOMAS STÖHLKER, STEPHAN FRITZSCHE
SYAP 1.4	Tue	12:30–13:00	P 1	Laser-based high photon flux XUV sources and applications in atomic physics — •JAN ROTHARDT, ROBERT KLAS, STEFAN DEMMLER, MAXIM TSCHERNAJEV, JENS LIMPET, ANDREAS TÜNNERMANN

Invited talks of the joint symposium SYAD

See SYAM for the full program of the symposium.

SYAD 1.1	Wed	11:00–11:30	RW 1	Exciton transport in disordered organic systems — •FRANZISKA FENNEL
SYAD 1.2	Wed	11:30–12:00	RW 1	Quantum dynamics in strongly correlated one-dimensional Bose gases — •FLORIAN MEINERT
SYAD 1.3	Wed	12:00–12:30	RW 1	Dynamics and correlations of a Bose-Einstein condensate of light — •JULIAN SCHMITT
SYAD 1.4	Wed	12:30–13:00	RW 1	Circular dichroism and accumulative polarimetry of chiral femtochemistry — •ANDREAS STEINBACHER

Invited talks of the joint symposium SYAM

See SYAM for the full program of the symposium.

SYAM 1.1	Thu	11:00–11:30	P 1	Buffer gas cooling of antiprotonic helium to $T=1.5-1.7$ K, and the antiproton to electron mass ratio — •MASAKI HORI
SYAM 1.2	Thu	11:30–12:00	P 1	The BASE Experiment: High-precision comparisons of the fundamental properties of protons and antiprotons — •C. SMORRA, M. BESIRLI, K. BLAUM, M. BOHMAN, M. J. BORCHERT, J. HARRINGTON, T. HIGUCHI, H. NAGAHAMA, Y. MATSUDA, A. MOOSER, C. OSPELKAUS, W. QUINT, S. SELNER, G. SCHNEIDER, N. SCHOEN, T. TANAKA, J. WALZ, Y. YAMAZAKI, S. ULMER
SYAM 1.3	Thu	12:00–12:30	P 1	Antihydrogen physics at the ALPHA experiment — •NIELS MADSEN
SYAM 2.1	Thu	14:30–15:00	P 1	Muon g-2 — •KLAUS JUNGSMANN
SYAM 2.2	Thu	15:00–15:30	P 1	Antihydrogen physics at ASACUSA and AEGIS — •CHLOÉ MALBRUNOT
SYAM 2.3	Thu	15:30–16:00	P 1	An experiment to measure the anti-hydrogen Lamb shift — •PAOLO CRIVELLI

Invited talks of the joint symposium SYLG

See SYLG for the full program of the symposium.

SYLG 1.1	Fri	11:00–11:30	P 1	Quantum Simulation of Lattice Gauge Theories with Cold Atoms and Ions — •PETER ZOLLER
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SYLG 1.2	Fri	11:30–12:00	P 1	Quantum Simulations with Cold Trapped Ions — ESTEBAN A. MARTINEZ, CHRISTINE A. MUSCHIK, PHILIPP SCHINDLER, DANIEL NIGG, ALEXANDER ERHARD, MARKUS HEYL, PHILIPP HAUKE, MARCELLO DALMONTE, THOMAS MONZ, PETER ZOLLER, •RAINER BLATT
SYLG 1.3	Fri	12:00–12:30	P 1	Studies of hot and dense nuclear matter at the Large Hadron Collider — •BOLESŁAW WYSŁOUCH
SYLG 1.4	Fri	12:30–13:00	P 1	Lattice gauge theory beyond QCD — •CLAUDIO PICA

Sessions

A 1.1–1.7	Mon	14:30–16:30	HS 20	Collision Experiments
A 2.1–2.7	Mon	14:30–16:30	N 1	Ultracold atoms and BEC - I (with Q)
A 3.1–3.7	Mon	14:30–16:30	N 2	XUV/X-ray spectroscopy I
A 4.1–4.7	Mon	14:30–16:30	N 3	Precision Spectroscopy I
A 5.1–5.7	Mon	14:30–16:30	P 104	Precision Measurements and Metrology: Gravity (with Q)
A 6.1–6.6	Mon	17:00–19:00	HS 20	Time-resolved spectroscopy
A 7.1–7.8	Mon	17:00–19:00	N 1	Ultracold atoms and BEC - II (with Q)
A 8.1–8.6	Mon	17:00–19:00	N 2	XUV/X-ray spectroscopy II
A 9.1–9.8	Mon	17:00–19:00	N 3	Precision Spectroscopy II
A 10.1–10.6	Mon	17:00–18:45	N 6	Diffraction and Coherences (with MO)
A 11.1–11.8	Mon	17:00–19:00	P 104	Precision Measurements and Metrology: Optical Clocks (with Q)
A 12.1–12.7	Tue	11:00–13:00	N 6	Clusters I (with MO)
A 13.1–13.8	Tue	11:00–13:00	P 104	Precision Measurements and Metrology: Interferometry I (with Q)
A 14.1–14.7	Tue	14:30–16:15	HS 20	Highly Charged Ions
A 15.1–15.8	Tue	14:30–16:30	N 1	Ultracold atoms and BEC - III (with Q)
A 16.1–16.7	Tue	14:30–16:30	N 2	XUV/X-ray spectroscopy III
A 17.1–17.7	Tue	14:30–16:15	N 3	Rydberg atoms
A 18.1–18.6	Tue	14:30–16:15	N 6	Helium Droplets and Systems (with MO)
A 19.1–19.9	Tue	14:30–16:45	P 104	Precision Measurements and Metrology: Interferometry II (with Q)
A 20.1–20.47	Tue	17:00–19:00	P OGs	Poster Session I
A 21.1–21.8	Wed	14:30–16:30	N 1	Ultracold atoms and BEC - IV (with Q)
A 22.1–22.7	Wed	14:30–16:30	N 2	Attosecond Science
A 23.1–23.7	Wed	14:30–16:30	N 3	Trapped ions
A 24.1–24.8	Wed	14:30–16:30	P 5	Laser Development and Applications (Spectroscopy) (with Q)
A 25.1–25.8	Wed	14:30–16:45	P 104	Ultracold Plasmas and Rydberg Systems (with Q)
A 26.1–26.48	Wed	17:00–19:00	P OGs	Poster Session II
A 27.1–27.4	Thu	11:00–12:15	P 5	Laser Applications: Optical Measurement Technology (with Q)
A 28.1–28.8	Thu	11:00–13:15	P 104	Ultracold Plasmas, Rydberg Systems and Molecules (with Q)
A 29.1–29.9	Thu	14:30–16:45	P 5	Ultrashort Laser Pulses: Generation and Applications (with Q)
A 30.1–30.7	Thu	14:30–16:30	P 104	Ultracold Atoms I (with Q)
A 31.1–31.48	Thu	17:00–19:00	P OGs	Poster Session III
A 32.1–32.8	Fri	11:00–13:00	HS 20	Rydberg gasses I
A 33.1–33.8	Fri	11:00–13:00	N 1	Ultracold atoms and BEC - V (with Q)
A 34.1–34.7	Fri	11:00–13:00	N 2	Atoms in Strong Fields I
A 35.1–35.7	Fri	11:00–13:00	N 3	Clusters II (with MO)
A 36.1–36.7	Fri	14:30–16:15	HS 20	Rydberg gasses II
A 37.1–37.5	Fri	14:30–16:00	N 1	Ultracold atoms and BEC - VI (with Q)
A 38.1–38.8	Fri	14:30–16:30	N 2	Atoms in Strong Fields II
A 39.1–39.7	Fri	14:30–16:30	N 3	Clusters III (with MO)
A 40.1–40.8	Fri	14:30–16:30	P 104	Ultracold Atoms II (with Q)

Annual General Meeting of the Atomic Physics Division

Friday 13.15–14.00 N 1