Atomic Physics Division Fachverband Atomphysik (A)

Dieter Bauer Institute of Physics University of Rostock Universitätsplatz 3 18051 Rostock dieter.bauer@uni-rostock.de

Overview of Invited Talks and Sessions

(Lecture rooms: C/HSW, C/kHS, and M/HS1; Poster: C/Foyer)

Invited Talks

A 2.1 A 13.1	Mon Tue	11:30–12:00 11:00–11:30	${ m M/HS1} { m M/HS1}$	Dynamic x-ray imaging of clusters in strong fields — •THOMAS FENNEL Observation of wave function collapse and four-electron Auger process
A 20.1	Wed	11:00-11:30	C/HSW	in inner-shell photoionization of atomic ions — •STEFAN SCHIPPERS Strong-field ionization of molecules in circularly polarized fields —
A 29.1 A 32.1	Thu Thu	11:00-11:30 14:30-15:00	C/HSW C/HSW	INGO PETERSEN, JOST HENKEL, •MANFRED LEIN Electronic structure in high-intensity x-ray fields — •ROBIN SANTRA Time-Resolved Measurement of Interatomic Coulombic Decay in Ne ₂
A 38.1	Fri	11:00-11:30	C/HSW	 → €KIRSTEN SCHNORR X-ray quantum optics: From Mössbauer to Fano — KILIAN P. HEEG,
			·	Christian Ott, Daniel Schumacher, Hans-Christian Wille, Ralf Röhlsberger, Thomas Pfeifer, •Jörg Evers

Invited talks of the joint symposium SYEP

See SYEP for the full program of the symposium.

SYEP 1.1	Mon	11:30-12:00	C/gHS	Few-body physics with ultracold atoms: What we learned from ce-
				$sium - \bullet Rudolf Grimm$
SYEP 1.2	Mon	12:00-12:30	C/gHS	Universality in halo nuclei — •DANIEL PHILLIPS
SYEP 2.1	Mon	14:30 - 15:00	C/gHS	Efimov Physics from Quantum Field Theory — •ERIC BRAATEN
SYEP 2.2	Mon	15:00 - 15:30	C/gHS	Efimov physics with multiple spin substates — \bullet CHRIS H GREENE

Invited talks of the joint symposium SYDM

See SYDM for the full program of the symposium.

SYDM 1.1	Tue	11:00-11:40	C/gHS	Searching for New Physics Effects in the Muon g -Factor — •B. LEE ROBERTS
SYDM 1.2	Tue	11:40-12:20	C/gHS	Dedicated storage ring EDM methods — •YANNIS SEMERTZIDIS
SYDM 2.1	Tue	14:30-15:10	C/gHS	The experimental search for the neutron electric dipole moment $-$
				•Klaus Kirch
SYDM 2.2	Tue	15:10-15:50	C/gHS	The muon g-2: where we are, what does it tell us? $-\bullet$ FRIEDRICH
				Jegerlehner

Invited talks of the joint symposium SYPS

See SYPS for the full program of the symposium.

SYPS 1.1	Tue	17:00-17:30	$\rm K/HS1$	Feshbach resonances and the production of ultracold molecules $-$
				•Jeremy M. Hutson
SYPS 1.2	Tue	17:30 - 18:00	K/HS1	New frontiers in quantum simulation with ultra-cold polar molecules
				— •Ana Maria Rey

SYPS 1.3	Tue	18:15 - 18:45	K/HS1	Ground-state molecules near quantum degeneracy: the nuts and
				bolts — •Hanns-Christoph Nägerl
SYPS 1.4	Tue	18:45 - 19:15	K/HS1	Prospects and future directions with quantum gases of ultracold po-
				lar molecules — •Silke Ospelkaus

Invited talks of the joint symposium SYEM

See SYEM for the full program of the symposium.

SYEM 1.1	Wed	11:00-11:30	C/gHS	Generation of Structure under Extreme Conditions: Ultracold
				Atoms meet Heavy-Ion Collissions — • JENS BRAUN
SYEM 1.2	Wed	11:30-12:00	C/gHS	Strongly Interacting Fermi Gases of Atoms and Molecules $-$
				•Martin Zwierlein
SYEM 1.3	Wed	12:00-12:30	C/gHS	Towards ultracold RbSr ground-state molecules $-$ •FLORIAN
				Schreck
SYEM 1.4	Wed	12:30 - 13:00	C/gHS	Multiflavor phenomena and synthetic gauge fields in strongly inter-
				acting quantum gases — • WALTER HOFSTETTER

Prize talks of the joint symposium SYAW

See SYAW for the full program of the symposium.

SYAW 1.1	Wed	14:30-15:15	C/gHS	Warum einzelne kalte Atome? — •PETER E. TOSCHEK
SYAW 1.2	Wed	15:15-16:00	C/gHS	Strongly interacting Rydberg gases in thermal vapor cells $-$
				•Tilman Pfau

Invited talks of the joint symposium SYTL

See SYTL for the full program of the symposium.

SYTL 1.1	Fri	11:00-11:30	C/gHS	Optical curl forces and beyond — • MICHAEL BERRY			
SYTL 1.2	Fri	11:30-12:00	C/gHS	Quantum memories for twisted photons — •ELISABETH GIACOBINO,			
				JULIEN LAURAT, DOMINIK MAXEIN, LAMBERT GINER, LUCILE VEISSIER,			
				Adrien Nicolas			
SYTL 2.1	Fri	14:30-15:00	C/gHS	Electron vortex beams: Twisted matter waves $- \bullet PETER$			
				Schattschneider			
SYTL 2.2	Fri	15:00 - 15:30	C/gHS	Inelastic effects on the lateral wave function of electron beams $-$			
				•Javier García de Abajo			

Sessions

A 1.1–1.7	Mon	11:30-13:15	C/HSW	Precision spectroscopy of atoms and ions I (with Q)
A 2.1–2.6	Mon	11:30-13:15	M/HS1	Atomic clusters (with MO)
A 3.1–3.5	Mon	11:30-12:45	G/gHS	Precision Measurements and Metrology I (with Q)
A 4.1–4.8	Mon	14:30-16:30	C/HSW	Ultra-cold atoms, ions and BEC I (with Q)
A 5.1–5.8	Mon	14:30-16:30	C/kHS	Atomic systems in external fields
A 6.1–6.7	Mon	14:30-16:30	P'H1	Precision Measurements and Metrology II (with Q)
A 7.1–7.8	Mon	17:00-19:00	C/Foyer	Poster: Atomic systems in external fields
A 8.1–8.6	Mon	17:00-19:00	C/Foyer	Poster: Photoionization
A 9.1–9.2	Mon	17:00-19:00	C/Foyer	Poster: Interaction with VUV and X-ray light I
A 10.1–10.17	Mon	17:00-19:00	C/Foyer	Poster: Interaction with strong or short laser pulses
A 11.1–11.8	Mon	17:00-19:00	C/Foyer	Poster: Atomic clusters (with MO)
A 12.1–12.8	Tue	11:00-13:00	C/kHS	Ultra-cold plasmas and Rydberg systems I (with Q)
A 13.1–13.8	Tue	11:00-13:15	M/HS1	Precision spectroscopy of atoms and ions II (with Q)
A 14.1–14.6	Tue	11:00-12:45	G/gHS	Precision Measurements and Metrology III (with Q)
A 15.1–15.8	Tue	14:30-16:30	C/HSW	Ultra-cold atoms, ions and BEC II (with Q)
A 16.1–16.8	Tue	14:30-16:30	C/kHS	Interaction with strong or short laser pulses I
A 17.1–17.8	Tue	14:30-16:30	P/H1	Precision Measurements and Metrology IV (with Q)
A 18.1–18.35	Tue	17:00-19:00	C/Foyer	Poster: Ultra-cold atoms, ions and BEC (with Q)
A $19.1 - 19.6$	Wed	11:00-12:30	C/HSO	Precision Measurements and Metrology V (with Q)

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		/	Interaction with strong or short laser pulses II
Wed	11:00-12:45	$\rm C/kHS$	Ultra-cold plasmas and Rydberg systems II (with Q)
Wed	11:00-13:00	M/HS1	Ultra-cold atoms, ions and BEC III (with Q)
Wed	14:30-16:30	$\rm C/HSW$	Ultra-cold atoms, ions and BEC IV (with Q)
Wed	14:30-16:30	C/kHS	Attosecond physics
Wed	14:30-16:30	PH/SR106	Clusters in Molecular Physics (with MO & MS)
Wed	17:00 - 19:00	C/Foyer	Poster: Collisions, scattering and recombination
Wed	17:00-19:00	C/Foyer	Poster: Attosecond physics
Wed	17:00-19:00	C/Foyer	Poster: Interaction with VUV and X-ray light II
Thu	11:00-13:15	C/HSW	Interaction with VUV and X-ray light I
Thu	11:00-13:00	M/HS1	Precision spectroscopy of atoms and ions III (with Q)
Thu	11:00-12:30	$\mathrm{P/H2}$	Ultracold Atoms: Trapping and Cooling I (with Q)
Thu	14:30-16:30	$\rm C/HSW$	Interaction with strong or short laser pulses III
Thu	14:30-16:30	C/kHS	Collisions, scattering and recombination
Thu	14:30-16:15	$\mathrm{P/H2}$	Ultracold Atoms: Trapping and Cooling II (with Q)
Thu	17:00-19:00	C/Foyer	Poster: Precision spectroscopy of atoms and ions (with Q)
Thu	17:00-19:00	C/Foyer	Poster: Ultra-cold plasmas and Rydberg systems (with Q)
Thu	17:00-19:00	C/Foyer	Poster: Twisted light and particles (SYTL)
Fri	11:00-13:15	$\rm C/HSW$	Interaction with VUV and X-ray light II
Fri	11:00-13:00	C/kHS	Precision spectroscopy of atoms and ions IV (with Q)
Fri	11:00-13:00	B/SR	Ultracold Atoms and Molecules (with Q)
Fri	11:00-13:15	M/HS1	Ultra-cold atoms, ions and BEC V (with Q)
Fri	11:00-12:45	$\mathrm{P/H2}$	Ultracold Plasmas and Rydberg Systems III (with Q)
Fri	14:30-16:00	${ m P/H2}$	Ultracold Plasmas and Rydberg Systems IV (with \mathbf{Q})
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Annual General Meeting of the Atomic Physics Division

Thursday 13:15-14:00 C/kHS