

Molecular Physics Division Fachverband Molekülphysik (MO)

Gereon Niedner-Schatteburg
Fachbereich Chemie
Technische Universität Kaiserslautern
Erwin-Schrödinger-Straße
67663 Kaiserslautern
gns@chemie.uni-kl.de

Overview of Invited Talks and Sessions

(Lecture rooms: BEBEL HS213 and SR144; Posters: Spree-Palais)

Invited and Topical Talks

MO 1.1	Mon	10:30–11:00	BEBEL HS213	Strongly driven quantum pendulum of a polar molecule — •SEBASTIAN TRIPPEL, TERENCE G. MULLINS, NELE L.M. MÜLLER, JENS S. KIENITZ, ROSARIO GONZÁLEZ-FÉREZ, JOCHEN KÜPPER
MO 3.1	Mon	14:00–14:30	BEBEL HS213	Imaging the Absolute Configuration of a Chiral Epoxide in the Gas Phase — •HOLGER KRECKEL, PHILIPP HERWIG, KERSTIN ZAWATZKY, MANFRED GRIESER, ODED HEBER, BRANDON JORDON-THADEN, CLAUDE KRANTZ, OLDŘICH NOVOTNÝ, ROLAND REPNOW, VOLKER SCHURIG, DIRK SCHWALM, ZEEV VAGER, ANDREAS WOLF, OLIVER TRAPP
MO 3.4	Mon	15:00–15:30	BEBEL HS213	Circular Dichroism in Mass Spectrometry: Laser Pulse Induced Electron Wavepacket Dynamics — •DOMINIK KRÖNER
MO 4.1	Mon	14:00–14:30	BEBEL SR144	Ultracold Rydberg plasma formation in intense laser-cluster interactions: resolving the mystery of highly charged ions — •THOMAS FENNEL
MO 6.1	Tue	10:30–11:00	BEBEL HS213	Time-resolved absorption studies of photoinitiator molecules in solution — •ANDREAS-NEIL UNTERREINER, HANNA A. ERNST, THOMAS J. A. WOLF, DOMINIK VOLL, ELENA FRICK, CHRISTOPHER BARNER-KOWOLLIK
MO 8.1	Tue	14:00–14:30	BEBEL HS213	Selected Personal Highlights of Electron Collision Work — •MICHAEL ALLAN
MO 12.1	Wed	14:00–14:30	BEBEL SR144	Ultrafast X-ray Auger Probing of photoexcited molecular dynamics — B. K. MCFARLAND, J. FARRELL, S. MIYABE, F. TARANTELLI, A. AGUILAR, N. BERRAH, C. BOSTEDT, J. D. BOZEK, P. H. BUCKSBAUM, J. C. CASTAGNA, R. N. COFFEE, J. P. CRYAN, L. FANG, R. FEIFEL, K. J. GAFFNEY, J. M. GLOWNIA, T. J. MARTINEZ, M. MUCKE, B. MURPHY, A. NATAN, T. OSIPOV, V. S. PETROVIC, S. SCHORB, TH. SCHULTZ, L. S. SPECTOR, M. SWIGGERS, I. TENNEY, S. WANG, J. L. WHITE, W. WHITE, •M. GUEHR
MO 17.1	Thu	14:00–14:30	BEBEL HS213	Non-adiabatic relaxation dynamics in perylene bisimide dimers excited by femtosecond laser pulses — •VOLKER ENGEL, BERND ENGELS, MIRJAM FALGE, MARTIN KESS, STEFAN LOCHBRUNNER, ALEXANDER SCHUBERT, VOLKER SETTELS, WALTER STRUNZ, FRANK WÜRTHNER

Invited talks of the joint symposium SYCS

See SYCS for the full program of the symposium.

SYCS 1.1	Mon	10:30–11:00	Audimax	Electron dynamics in chiral systems: From structure determination to violation of fundamental symmetries — •ROBERT BERGER
----------	-----	-------------	---------	--

SYCS 1.2	Mon	11:00–11:30	Audimax	Electron Scattering in Chiral Photoionization: probing fundamental electron-molecule interactions to chiral molecular recognition — ●IVAN POWIS
SYCS 1.3	Mon	11:30–12:00	Audimax	Enantiomer Identification of Chiral Molecules in Mixtures using Microwave Three-Wave Mixing — ●MELANIE SCHNELL
SYCS 1.4	Mon	12:00–12:30	Audimax	Mass-selective circular dichroism spectroscopy of chiral molecules — ●ULRICH BOESL

Invited talks of the joint symposium SYAD

See SYAD for the full program of the symposium.

SYAD 1.1	Tue	10:30–11:00	Audimax	Rotationally resolved fluorescence spectroscopy - from neurotransmitter to conical intersection — ●CHRISTIAN BRAND
SYAD 1.2	Tue	11:00–11:30	Audimax	Quantum simulations with ultracold atoms: Beyond standard optical lattices — ●PHILIPP HAUKE
SYAD 1.3	Tue	11:30–12:00	Audimax	Degenerate quantum gases of alkaline-earth atoms — ●SIMON STELLMER
SYAD 1.4	Tue	12:00–12:30	Audimax	One step beyond entanglement: general quantum correlations and their role in quantum information theory — ●ALEXANDER STRELTSOV

Prize talks of the joint symposium SYAW

See SYAW for the full program of the symposium.

SYAW 1.1	Wed	14:00–14:30	Kinosaal	Semicrystalline polymers - pathway of crystallization and deformation properties — ●GERT STROBL
SYAW 1.2	Wed	14:30–15:00	Kinosaal	A measurement of the evolution of Interatomic Coulombic Decay in the time domain — ●TILL JAHNKE
SYAW 1.3	Wed	15:00–15:30	Kinosaal	A one-dimensional liquid of fermions with tunable spin — ●MASSIMO INGUSCIO
SYAW 1.4	Wed	15:30–16:00	Kinosaal	Non-equilibrium: from heat transport to turbulence (to life). — ●DAVID RUELLE
SYAW 2.1	Wed	16:30–17:00	Kinosaal	Investigation of charge transfer efficiency of CCD image sensors for the scientific small satellite mission “AsteroidFinder” — ●ANDREJ KRIMLOWSKI
SYAW 2.2	Wed	17:00–17:30	Kinosaal	Metrology of atomic hydrogen: from the Rydberg constant to the size of the proton — ●FRANÇOIS BIRABEN

Invited talks of the joint symposium SYSE

See SYSE for the full program of the symposium.

SYSE 1.1	Wed	14:00–14:30	Audimax	Addressing open questions of stellar evolution with laboratory experiments — ●ALMUDENA ARCONES
SYSE 1.2	Wed	14:30–15:00	Audimax	Methods and problems of the modern theory of stellar evolution — ●ACHIM WEISS
SYSE 1.3	Wed	15:00–15:30	Audimax	Photoabsorption and opacity in the X-ray region: The role of highly charged ions — ●JOSÉ R. CRESPO LÓPEZ-URRUTIA
SYSE 1.4	Wed	15:30–16:00	Audimax	Neutron-rich matter: From cold atoms to neutron stars — ●ACHIM SCHWENK

Invited talks of the joint symposium SYRE

See SYRE for the full program of the symposium.

SYRE 1.1	Wed	16:30–17:00	Audimax	Rare and large events: examples from the natural sciences and economics — ●THOMAS GUHR
SYRE 1.2	Wed	17:00–17:30	Audimax	The roles of energy-level and electronic-coupling fluctuations in the control of biomolecular and small-molecule charge transfer reactions — ●SPIROS SKOURTIS

SYRE 1.3	Wed	17:30–18:00	Audimax	What do we know about extreme solar events? — ●ILYA USOSKIN
SYRE 1.4	Wed	18:00–18:30	Audimax	The climate impact of very large volcanic eruptions: An Earth system model approach — ●CLAUDIA TIMMRECK

Invited talks of the joint symposium SYET

See SYET for the full program of the symposium.

SYET 1.1	Thu	10:30–11:00	SPA Kapelle	On the role of charge transfer excitations in mediating triplet diffusion, singlet fission and dissociation in organics — ●DAVID BELJONNE
SYET 1.2	Thu	11:00–11:30	SPA Kapelle	Disorder engineered long-range exciton migration in J-aggregates - observation of fluorescence from low-laying individual Lévy states — ●IVAN SCHEBLYKIN, ABOMA MERDASA, ÁNGEL JIMÉNEZ, THEO KAISER, FRANK WÜRTHNER
SYET 1.3	Thu	11:30–12:00	SPA Kapelle	Quantum dynamics of molecular and atomic aggregates — ●ALEXANDER EISFELD
SYET 1.4	Thu	12:00–12:30	SPA Kapelle	Energy transport in ultracold Rydberg aggregates — ●MATTHIAS WEIDEMÜLLER

Invited talks of the joint symposium SYPS

See SYPS for the full program of the symposium.

SYPS 1.1	Thu	14:10–14:40	Audimax	Oxygen and imaging, a perfect match — ●DAVID PARKER
SYPS 1.2	Thu	14:40–15:10	Audimax	Attosecond imaging — ●MARC VRAKING
SYPS 1.4	Thu	15:25–15:55	Audimax	Applications of the fast imaging Pixel Imaging Mass Spectrometry camera — ●MARK BROUARD
SYPS 2.1	Thu	16:30–17:00	Audimax	Unraveling the dynamics of state- and conformer selected molecules fixed in space with the VMI — ●JOCHEN KÜPPER
SYPS 2.3	Thu	17:15–17:45	Audimax	Velocity map imaging: from molecules to clusters, nanoparticles and aerosols — ●MICHAL FARNIK, VIKTORIYA POTERYA, JOZEF LENGYEL, ANDRIY PYSANENKO, PAVLA SVRCKOVA, JAROSLAV KOCISEK
SYPS 2.5	Thu	18:00–18:30	Audimax	Velocity map imaging studies of quantum state resolved scattering at gas-solid and gas-SAMs surfaces — ●DAVID J. NESBITT, MONIKA GRUETTER, J. ROBERT ROSCIOLI, CARL HOFFMAN, DANIEL J. NELSON

Invited talks of the joint symposium SYQS

See SYQS for the full program of the symposium.

SYQS 1.1	Fri	10:30–11:15	Audimax	Tutorial Complex Systems: From Classical to Quantum, from Single to Many Particle Problems — ●KLAUS RICHTER
SYQS 1.2	Fri	11:30–12:00	Audimax	Multiphoton random walks: Experimental Boson Sampling on a photonic chip — ●IAN WALMSLEY, JUSTIN SPRING, BEN METCALF, PETER HUMPHREYS, STEVE KOLTHAMMER, XIANMIN JIN, ANIMESH DATTA, JAMES GATES, PETER SMITH
SYQS 2.1	Fri	14:00–14:30	Audimax	Charge transfer and quantum coherence in solar cells and artificial light harvesting systems — ●CHRISTOPH LIENAU
SYQS 2.6	Fri	15:30–16:00	Audimax	Feedback control: from Maxwell's demon to quantum phase transitions — ●TOBIAS BRANDES
SYQS 3.4	Fri	17:15–17:45	Audimax	Multi-photon dynamics in complex integrated structures — ●FABIO SCIARRINO
SYQS 3.5	Fri	17:45–18:15	Audimax	Complexity and many-boson coherence — ●MALTE TICHY

Sessions

MO 1.1–1.7	Mon	10:30–12:30	BEBEL HS213	Cold Molecules 1
MO 2.1–2.8	Mon	10:30–12:30	BEBEL SR144	Clusters
MO 3.1–3.6	Mon	14:00–16:00	BEBEL HS213	Chiral Systems (SYCS 2)

MO 4.1–4.7	Mon	14:00–16:00	BEBEL SR144	Theory 1: Molecular Dynamics
MO 5.1–5.28	Mon	16:30–18:30	Spree-Palais	Posters 1: Electronic Spectroscopy, Photochemistry, Femtosecond Spectroscopy
MO 6.1–6.6	Tue	10:30–12:15	BEBEL HS213	Femtosecond Spectroscopy 1
MO 7.1–7.8	Tue	10:30–12:30	BEBEL SR144	Experimental Techniques 1
MO 8.1–8.7	Tue	14:00–16:00	BEBEL HS213	Electronic Spectroscopy 1
MO 9.1–9.8	Tue	14:00–16:00	BEBEL SR144	Theory 2: Molecular Dynamics & Quantum Chemistry
MO 10.1–10.28	Tue	16:30–18:30	Spree-Palais	Posters 2: Biomolecules, Energy Transfer, Clusters, Quantum Chemistry, Molecular Dynamics and Chirality
MO 11.1–11.7	Wed	14:00–15:45	BEBEL HS213	Biomolecules 1
MO 12.1–12.5	Wed	14:00–15:30	BEBEL SR144	Experimental Techniques 2
MO 13.1–13.40	Wed	16:30–18:30	Spree-Palais	Posters 3: Cold Molecules, Helium Nano Droplets, and Experimental Techniques
MO 14.1–14.8	Thu	10:30–12:30	BEBEL HS213	Cold Molecules 2
MO 15.1–15.7	Thu	10:30–12:15	BEBEL SR144	Experimental Techniques 3
MO 16.1–16.7	Thu	10:30–12:30	BEBEL E44/46	Atomic clusters (with A)
MO 17.1–17.5	Thu	14:00–15:30	BEBEL HS213	Excitons and Excitation Transfer (SYET 2)
MO 18.1–18.7	Thu	14:00–15:45	BEBEL SR144	Theory 3: Quantum Chemistry
MO 19.1–19.7	Thu	16:30–18:15	BEBEL HS213	Femtosecond Spectroscopy 2
MO 20.1–20.8	Thu	16:30–18:30	BEBEL SR144	Electronic Spectroscopy 2
MO 21.1–21.8	Fri	10:30–12:30	BEBEL HS213	Photochemistry
MO 22.1–22.6	Fri	10:30–12:00	BEBEL SR144	Cold Molecules 3
MO 23.1–23.7	Fri	14:00–15:45	BEBEL HS213	Femtosecond Spectroscopy 3
MO 24.1–24.6	Fri	14:00–15:30	BEBEL SR144	Biomolecules 2

Annual General Meeting of the Molecular Physics Division

Dienstag 12:30–13:00 BEBEL HS213

- Bericht
- Verschiedenes