Plenary and Prize Talks, Evening Talks, Special Talks, Joint Symposia, Tutorials: Regensburg 2016

Plenary Talks, Prize Talks, Evening Talks, Special Talks

Mo, 08:30	PV I	Plenarvortrag: Merging light with nanoparticles: artificial molecules, photocatalysis, cancer therapy, and solar steam — •Naomi J. Halas
Mo, 13:15	PV II	Preisträgervortrag: Diffractive imaging from multiple near-field diffraction intensities — •Lars Lötgering
Mo, 13:15	PV III	Spezialvortrag: Perspectives in Scientific Communication: Publishing in Transition — •Alexander Grossmann
Mo, 14:00	PV IV	Plenarvortrag: Recent Advances and Opportunities in Electron Microscopy of Materials — •Ulrich Dahmen
Mo, 14:00	PV V	Plenarvortrag: From patterns to function in living systems: dryland ecosystems as a case study — •Ehud Meron
Di, 08:30	PV VI	Plenarvortrag: Linking Individual to Collective Behavior in Complex Adaptive Networks — •Jorge M. Pacheco
Di, 13:15	PV VII	Preisträgervortrag: Quantum Optics in Vacuum: The Casimir Effect — •Astrid Lambrecht
Di, 13:15	PV VIII	Preisträgervortrag: Energie und Klima: Cool Facts for a Hot Debate ? — •Christoph Buchal
Di, 13:15	PV IX	Spezialvortrag: The German Research Foundation -- a short overview — •Cosima Schuster and Michael Mössle
Di, 16:00	PV X	Plenarvortrag: The puzzle of Self-Assembly and the Self-Assembly of Puzzles — •Daan Frenkel
Mi, 08:30	PV XI	Plenarvortrag: Topological Physics in HgTe-based Quantum Devices — •Laurens W. Molenkamp
Mi, 13:15	PV XII	Preisträgervortrag: Topological Spin Textures in Chiral Magnets — •Christian Pfleiderer
Mi, 13:15	PV XIII	Preisträgervortrag: Spontaneous symmetry breaking out of equilibrium: Kibble-Zurek mechanism in colloidal monolayers — •Peter Keim, Sven Deutschländer, Georg Maret, and Patrick Dillmann
Mi, 13:15	PV XIV	Diskussion: A career in science: Should I stay or should I go? — •Martin Wolf
Mi, 14:00	PV XV	Plenarvortrag: Taming Molecules in Hybrid Nanosystems — •Jürgen P. Rabe
Mi, 14:00	PV XVI	Plenarvortrag: Antiferromagnetic spintronics — •Tomas Jungwirth
Mi, 18:00	PV XVII	Abendvortrag: Max-von-Laue-Lecture: Nuclear Energy: Practical Realities and Significant Challenges — •Allison Macfarlane
Mi, 20:00	PV XVIII	Abendvortrag: Vorhersagen sind schwierig ... Möglichkeiten und Grenzen von Klimamodellen — •Jochem Marotzke

Do, 08:30	PV XIX	Plenarvortrag: Many body methods for materials: current status and future developments — •Georg Kresse
Do, 13:15	PV XX	Preisträgervortrag: Morphometrie materieller Strukturen — •Herbert Wagner
Do, 13:15	PV XXI	Preisträgervortrag: Microscopic view on ultrafast carrier dynamics in graphene — •Ermin Malic
Do, 13:15	PV XXII	Spezialvortrag: What really matters - Einflussfaktoren auf den beruflichen Erfolg von Physikerinnen und Physikern — •Bettina Langfeldt
Do, 14:00	PV XXIII	Plenarvortrag: The future of computing — •Michelle Y Simmons
Do, 14:00	PV XXIV	Plenarvortrag: Single-Molecule Spectroscopy of Biomolecular Dynamics at the Nanoscale — •Ben Schuler
Do, 17:30	PV XXV	Abendvortrag: Lise-Meitner-Lecture: Ist Leben konstruierbar? — •Petra Schwille
Fr, 08:30	PV XXVI	Plenarvortrag: Towards a Sustainable Energy System; the German Model — •Robert Schlögl

Joint Symposia

Montag *Vormittag*	**Fundamentals of Hybrid and Perovskite Photovoltaics (SYHP)** der FVe CPP (federführend), DS, DF und HL **Organisation:** Lukas Schmidt-Mende, Universität Konstanz Vladimir Dyakonov, Universität Würzburg Christoph Lienau, Universität Oldenburg
Montag *Mittag*	**Symposium SKM Dissertationspreis (SYSD)** **Organisation:** Martin Aeschlimann, TU Kaiserslautern
Montag *Nachmittag*	**Caloric Effects in Ferroic Materials (SYCE)** der FVe MM (federführend), MA und DF **Organisation:** Claude Ederer, ETH Zürich, CH Karsten Albe, TU Darmstadt Sebastian Fähler, IFW Dresden
Dienstag *Vormittag*	**Chimera States: Coherence-Incoherence Patterns in Complex Networks (SYCS)** der FVe DY (federführend) und SOE **Organisation:** Joachim Peinke, Universität Oldenburg Jens Christian Claussen, Jacobs University Bremen
Mittwoch *Vormittag*	**Topological Insulators: Status Quo and Future Directions (SYTI)** der FVe TT (federführend), DS, O, HL, MA **Organisation:** Stephan Rachel, TU Dresden Jaime Sánchez-Barriga, HZ Berlin
Mittwoch *Nachmittag*	**Quantum Signatures in Magnetism (SYQS)** der FVe MA (federführend), TT, HL und O **Organisation:** Hans Hübl, Walther-Meissner-Institut, Garching Sebastian Gönnenwein, Walther-Meissner-Institut, Garching Rudolf Gross, Walther-Meissner-Institut, Garching
Donnerstag *Vormittag*	**Scientometric Maps and Dynamic Models of Science and Scientific Collaboration Networks (SYSM)** der FVe SOE (federführend), DY, BP und der jDPG **Organisation:** Jens Christian Claussen, Jacobs University Bremen Andrea Scharnhorst, Amsterdam (NL)

Donnerstag Nachmittag	**Anomalous Diffusion in Complex Environments (SYAD)** der FVe BP (federführend), CPP, DY **Organisation:** Ludger Santen, Universität des Saarlandes M. Reza Shaebani, Universität des Saarlandes
Freitag Vormittag	**Frontiers of Electronic-Structure Theory: Focus on Topology and Transport (SYES)** der FVe O (federführend), DS, HL, MA und MM **Organisation:** Ingrid Mertig, Universität Halle Giovanni Vignale, University Missouri (USA) Matthias Scheffler, FHI Berlin

Tutorials: Sunday, 6 March 2016, starting 16:00 h

TUT 1: **Plasmonics** (HL with O)

1.1: Graphene and Metal Plasmonics for Mid-IR Biosensing — •Hatice Altug
1.2: Active 3D plasmonics — •Na Liu
1.3: Infrared nanoscopy and nano-FTIR spectroscopy by elastic light scattering from a scanning probe tip — •Rainer Hillenbrand
1.4: Complex functional plasmonics: Ultrafast hybrid nonlinear plasmonics — •Harald Giessen

TUT 2: **Evolutionary Dynamics and Applications to Biology, Social and Economic Systems** (SOE with DY, BP, AGjDPG)

2.1: Predicting evolution: statistical mechanics and biophysics far from equilibrium — •Michael Lässig
2.2: Voter models of social opinion formation. — •Katarzyna Sznajd-Weron
2.3: Maximum-entropy methods for network reconstruction, systemic risk estimation, and early-warning signals — •Diego Garlaschelli

TUT 3: **Spin Hall Effect and Spin-Orbit Torques** (MA)

3.1: Introduction to Spin Hall Effect — •Christian Back
3.2: Magnetisation of ferromagnetic nanostructures manipulated by spin-orbit torques — •Stefania Pizzini
3.3: Spin Hall effect and spin-orbit torque from material-specific theory — •Yuriy Mokrousov

TUT 4: **Hybrid and Perovskite Photovoltaics** (CPP with DF, DS, HL)

4.1: Perovskite photovoltaics: Synthesis, structure and device architecture — •Pablo Docampo
4.2: Charge Carrier Generation and Recombination in Organic and Perovskite Solar Cells — •Andreas Baumann
4.3: The electronic structure in hybrid perovskite layers and devices — •Selina Olthof

TUT 5: **Correlations in Integrable Quantum Many-Body Systems** (TT)

5.1: Correlation functions of integrable models — •Frank Göhmann
5.2: Non-Abelian anyons — •Holger Frahm
5.3: Quantum quenches and equilibration of lattice and continuum systems — •Michael Brockmann