

Synopsis of the Daily Program

Sunday, March 13, 2011

TUT

Sessions

16:00	HSZ 403	TUT 1	Physics with Neutrons – From Proteins via Polymer Thin Films to Spin Waves (CPP)
16:00	HSZ 03	TUT 2	Energy Concepts of the Future (AGjDPG, AKE)
16:00	HSZ 04	TUT 3	Collective Dynamics of Firms: A Statistical Physics Approach (SOE)
16:00	HSZ 401	TUT 4	State of the Art of X-Ray Microanalysis (MI)

MI

Tutorials

16:00	HSZ 401	MI 1.1	Energy dispersive X-ray spectroscopy, from the method to the instrumentation •Jana Berlin
16:45	HSZ 401	MI 1.2	WDS technique – advanced analytical tool for the SEM •Frank Bauer
17:45	HSZ 401	MI 1.3	Hard X-ray scanning microscopy and tomography with elemental, chemical, and structural contrast •Christian G. Schroer
18:30	HSZ 401	MI 1.4	2D- and 3D-microanalysis using focussed MeV-ion beams •Tilman Butz

Session

16:00	HSZ 401	MI 1	Tutorial on State of the Art of X-Ray Microanalysis
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AKE

Session

16:00	HSZ 03	AKE 1	Tutorial – Future Energy Technologies (jointly with and organised by AGjDPG)
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AGjDPG

Tutorials

16:00	HSZ 03	AGjDPG 1.1	Electrolytes in lithium-ion batteries: state of the art and future trend •Andrea Balducci
16:35	HSZ 03	AGjDPG 1.2	Fuel cells •Uwe Reimer
17:20	HSZ 03	AGjDPG 1.3	Physical aspects of photobioreactors for growing biomass •Hilmar Franke
17:55	HSZ 03	AGjDPG 1.4	DESERTEC – an international approach to use renewable energies at large scale •Michael Düren

Session

16:00	HSZ 03	AGjDPG 1	Tutorial – Energy Concepts of the Future (with AKE)
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CPP

16:00	HSZ 403	CPP 1.1	Tutorials Neutrons as a sensitive tool to investigate nano- and mesostructured materials •Stephan Förster
16:45	HSZ 403	CPP 1.2	Reflectivity and GISAS •Roland Steitz
17:45	HSZ 403	CPP 1.3	Neutron spectroscopy on solids •Astrid Schneidewind
16:00	HSZ 403	CPP 1	Session Tutorial: Physics with neutrons – from proteins via polymer thin films to spin waves

SOE

16:00	HSZ 04	SOE 1.1	Tutorial Collective Dynamics of Firms: A Statistical Physics Approach •Frank Schweitzer
16:00	HSZ 04	SOE 1	Session Tutorial
19:00	Mensa Bergstraße / Mensa Mommsenstraße		Welcome evening

Monday, March 14, 2011

Plenary Talk, Plenary Talk (SAMOP), Plenary Talk (SKM), Prize Talk

08:30	HSZ 01	PV I	Molecules at surfaces: From atoms to complexity •Gerhard Ertl
09:15	HSZ 02	PV II	Pairing in Unusual Places – Stretching the Realm of Superconductivity •Randall Hulet
09:15	HSZ 01	PV III	Linear and non-linear mechanics of biopolymer networks •David A. Weitz
13:30	HSZ 01	PV IV	Brownian motion and thermodynamics in special relativity •Jörn Dunkel (Laureate of the Gustav-Hertz-Prize 2011)

SYAP

Invited Talks

10:30	HSZ 01	SYAP 1.1	Observing Intra-atomic Electron Correlation by Tunnelling and Recollision •Paul Corkum
11:00	HSZ 01	SYAP 1.2	Attosecond time-resolved molecular electron dynamics •Marc Vrakking
11:30	HSZ 01	SYAP 1.3	Opportunities in Attosecond Science using Core Level Spectroscopy •Anders Nilsson
12:00	HSZ 01	SYAP 1.4	Attosecond spectroscopy on solid surfaces •Reinhard Kienberger
12:30	HSZ 01	SYAP 1.5	Condensed matter effects in attosecond physics •Pedro M. Echenique

Session

10:30	HSZ 01	SYAP 1	Attosecond Physics: Atoms, Molecules, Condensed Matter
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SYOM

Invited Talks

14:30	HSZ 01	SYOM 1.1	Photonic Metamaterials and Transformation Optics: Recent Progress •Martin Wegener
15:00	HSZ 01	SYOM 1.2	Keeping a tight focus on matter •Philip St. J. Russell
15:30	HSZ 01	SYOM 1.3	The Physics of Photonic Crystals LEDs •Claude Weisbuch, Elison Matioli
16:15	HSZ 01	SYOM 1.4	Using nanophotonic structures to overcome conventional limits in solar energy conversion •Shanhui Fan
16:45	HSZ 01	SYOM 1.5	Plasmonic nanocavities: New design concepts and determination of the complete mode spectrum using electron-beam spectroscopies •Stefan A. Maier

Session

14:30	HSZ 01	SYOM 1	Artificial Optical Materials
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ISS

Sessions

10:30	HSZ 02	ISS 1	Micro Mechanical Oscillator 1 (Q, TT)
14:30	HSZ 02	ISS 2	Micro Mechanical Oscillator 2 (Q, TT)

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GP

Invited Talks

- 11:10 HSZ 204 GP 1.2 Physik im Kalten Krieg – Physikgeschichte des Kalten Kriegs
•Christian Forstner
- 11:55 HSZ 204 GP 1.3 Kernschmelze. Der Einfluss von Nuklearwaffen auf Politik und politisches Denken
•Bernd Greiner
- 18:15 HSZ 204 Annual General Meeting of the History of Physics division

Sessions

- 11:00 HSZ 204 GP 1 Einführung
- 14:00 HSZ 204 GP 2 DDR
- 16:30 HSZ 204 GP 3 DDR/Kooperation
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MI

Invited Talks

- 09:30 BEY 81 MI 2.1 Diffraction techniques in the scanning electron microscope: making SEM a universal tool for microstructure research
•Stefan Zaefferer
- 14:30 BEY 81 MI 3.1 Transmission electron microscopy of interface and defect phenomena of functional materials
•Wolfgang Jäger
- 15:15 BEY 81 MI 3.2 The contrast mechanisms of LL-BSE electrons in FE-SEM – Characterization of polymer, single proteins, and oxidization states of elements
•Heiner Jaksch

Sessions

- 09:30 BEY 81 MI 2 Electron Backscattering and Kossel X-Ray Diffraction
- 14:30 BEY 81 MI 3 TEM- and SEM-based Material Analysis
- 17:30 P5 MI 4 Poster: Microanalysis and Microscopy
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ST

Sessions

- 14:00 POT 112 ST 1 Radiation Therapy I Fast Ions: Production, Physical Dosimetry, Biological Effets, Medical Effects
- 17:00 P2 ST 2 Radiation and Medical Physics Posters
- 18:00 POT 361 Annual General Meeting of the Radiation and Medical Physics division
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AKE

Invited Talks

- 11:00 MENSA Dül AKE 2.1 Das Energie-Konzept der Bundesregierung und andere Optionen für die Energiezukunft Deutschlands
•Manfred Popp
- 11:30 MENSA Dül AKE 2.2 A strategy for competitive, sustainable and secure energy: Energy 2020
•Stephan Kolb
- 12:00 MENSA Dül AKE 2.3 Vergleichende Bewertung von Stromerzeugungstechniken
•Rainer Friedrich

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AKE

14:00	MENSA Dül	AKE 3.1	Endlagerung von hochradioaktiven Abfällen – internationaler Forschungsstand und Perspektiven •Horst Geckeis, Bernhard Kienzler, Klaus Gompper
14:30	MENSA Dül	AKE 3.2	ADS (Accelerator-Driven System) Kernreaktoren: Status und Perspektiven •Alex C. Mueller
15:00	MENSA Dül	AKE 4.1	Fusion research for ITER – what we can learn from JET •Francesco Romanelli
15:30	MENSA Dül	AKE 4.2	Der Stellarator, ein alternatives Einschlusskonzept für ein Fusionskraftwerk •Robert Wolf
16:45	MENSA Dül	AKE 5.1	Energiespeicher für Elektromobilität Stand der Technik und Perspektiven •Margret Wohlfahrt-Mehrens
17:45	MENSA Dül	AKE 5.4	Production and conversion of liquid fuels and hydrogen from biomass and natural gas using micro-reactor technology •Peter Pfeifer
			Sessions
11:00	MENSA Dül	AKE 2	Energiepolitik und Technologiebewertung
14:00	MENSA Dül	AKE 3	Kernspaltung
15:00	MENSA Dül	AKE 4	Fusionsforschung
16:45	MENSA Dül	AKE 5	Mobilität

AGjDPG

20:00	TRE Ma	AGjDPG 2	Session EinsteinSlam
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AGPhil

16:30	BEY 154	AGPhil 2.1	Invited Talk Das Problem der Interpretation der modernen Physik •Peter Mittelstaedt
14:00	BEY 154	AGPhil 1	Sessions Epistemological and Conceptual Foundations
16:30	BEY 154	AGPhil 2	Interpretation physikalischer Theorien
18:30	BEY 154		Annual General Meeting of the Philosophy of Physics working group

A

10:30	BAR 205	A 1.1	Invited Talks First results from multi-coincidence experiments at LCLS •Daniel Rolles, Benedikt Rudek, Artem Rudenko, Benjamin Erk, Lutz Foucar, Sascha Epp, Ilme Schlichting, Lothar Strüder, Joachim Ullrich, the CAMP collaboration
11:00	BAR 205	A 1.2	X-FEL induced multi-photon processes •Bertold Krässig
11:30	BAR 205	A 1.3	X-ray femtochemistry: Mapping the electronic structure of molecules during chemical reactions with x-ray spectroscopy •Philippe Wernet

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A

14:00	BAR 106	A 5.1	New insights in molecular photoionization physics – Coherence properties of the valence photoionization of N ₂ , and O ₂ , •Jens Viefhaus, Markus Ilchen, Sascha Deinert, Leif Glaser, Frank Scholz, Peter Walter, Markus Braune, André Meißner, Lokesh Tribedi, Uwe Becker
14:30	BAR 106	A 5.2	Appearance of coherent localization due to the Auger Doppler effect •Burkhard Langer, Rainer Hentges, Oliver Kugeler, Markus Braune, Sanja Korica, Jens Viefhaus, Daniel Rolles, Uwe Hergenbahn, Hironobu Fukuzawa, Xiaojing Liu, Yusuke Tamenori, Masamitsu Hoshino, Hiroshi Tanaka, Christophe Nicolas, Catalin Miron, Omar Al-Dossary, Kiyoshi Ueda, Uwe Becker
16:30	BAR 106	A 8.1	Ultrafast Electron and Nuclear Dynamics in Dissociative Ionization of H ₂ /D ₂ probed by Molecular Frame Photoemission. •Danielle Dowek
17:00	BAR 106	A 8.2	High-resolution soft X-ray spectroscopies of isolated species •Catalin Miron, Victor Kimberg, Andreas Lindblad, Xiao-Jing Liu, Christophe Nicolas, Emmanuel Robert, Johan Södrestrom, Oksana Travnikova,
17:30	BAR 106	A 8.3	Double Photoionization of Aromatic Hydrocarbons •Ralf Wehlitz

Sessions

10:30	BAR 205	A 1	Interaction with VUV and X-ray light (FEL) I
10:30	BAR 106	A 2	Ultra-cold atoms, ions and BEC I (with Q)
10:30	SCH 251	A 3	Ultracold Atoms: Manipulation and Detection (with Q)
14:00	BAR 205	A 4	Precision spectroscopy of atoms and ions I
14:00	BAR 106	A 5	Photoionization I
16:30	BAR 205	A 6	Precision spectroscopy of atoms and ions II
16:00	P1	A 7	Poster I
16:30	BAR 106	A 8	Photoionization II

MO

Sessions

10:30	TOE 317	MO 1	Biomolecules
10:30	MER 02	MO 2	Theory: Quantum Chemistry and Molecular Dynamics
10:30	BAR Schön	MO 3	Cold Molecules I
14:30	TOE 317	MO 4	Femtosecond Spectroscopy I
14:30	MER 02	MO 5	Collisions, Energy Transfer
16:00	P1	MO 6	Poster: Cold Molecules
16:00	P1	MO 7	Poster: Cluster
16:00	P1	MO 8	Poster: Spectroscopy in He Droplets

MS

Invited Talks

10:30	GÖR 229	MS 1.1	CologneAMS, ein neues Zentrum für Beschleuniger-Massenspektrometrie in Deutschland •Alfred Dewald, Tibor Dunai, Stefan Heinze, Jan Jolie, Martin Melles, Jürgen Richter, Ulrich Radtke, Janette Rethemeyer, Michael Staubwasser, Andreas Zilges, Friedhelm von Blanckenburg
14:00	GÖR 229	MS 2.1	Setting-up an accelerator mass spectrometry (AMS) facility: The role of chemistry

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MS

•Silke Merchel, Frans Munnik, Christoff Andermann, Didier Bourlès, Régis Braucher, Richard Gloaguen, Martin Martschini, Peter Steier

Sessions

10:30	GÖR 229	MS 1	Accelerator Mass Spectrometry and Applications
14:00	GÖR 229	MS 2	Accelerator Mass Spectrometry and Applications
16:00	P1	MS 3	Poster

Q**Sessions**

10:30	HSZ 02	Q 1	Micro Mechanical Oscillator 1
10:30	HÜL 386	Q 2	Quantum Gases: Bosons 1
10:30	BAR Schön	Q 3	Cold Molecules 1
10:30	BAR 106	Q 4	Ultra-cold atoms, ions and BEC I
10:30	SCH 251	Q 5	Ultracold Atoms: Manipulation and Detection
10:30	SCH A01	Q 6	Quantum Effects: Light Scattering and Propagation
10:30	SCH A118	Q 7	Quantum Information: Concepts and Methods 1
10:30	SCH A215	Q 8	Photonics 1
14:30	HSZ 02	Q 9	Micro Mechanical Oscillator 2
14:30	HÜL 386	Q 10	Quantum Gases: Bosons 2
14:30	BAR Schön	Q 11	Quantum Information: Atoms and Ions 1
14:30	SCH A118	Q 12	Quantum Information: Concepts and Methods 2
14:30	SCH A215	Q 13	Laserentwicklung: Festkörperlaser 1
14:30	SCH 251	Q 14	Ultrakurze Laserpulse: Erzeugung 1
16:30	P1	Q 15	Poster 1: Quanteninformation, Quanteneffekte, Laserentwicklung, Laseranwendungen, Ultrakurze Pulse, Photonik

BP**Invited Talks**

10:15	ZEU 250	BP 1.1	High throughput microscopy for systems biology: from genome-wide profiling to the analysis of protein complexes •Jan Ellenberg
10:15	ZEU 260	BP 2.1	Protein Structure and Dynamics from Low-Resolution Data •Gunnar F. Schröder
14:00	ZEU 260	BP 4.1	Single-molecule detection of DNA repair in real-time •Terence Strick, Kevin Howan, Nigel Savery, Seth Darst, MM2M FP7 Consortium
14:00	ZEU 250	BP 5.1	Are biomechanical changes necessary for tumor progression? – The impact of cell mechanics on cancer development •Mareike Zink, Anatol Fritsch, Tobias Kießling, K. David Nnetu, Steve Pawlizak, Franziska Wetzel, Josef Käs

Sessions

10:15	ZEU 250	BP 1	Statistical Physics in Biological Systems I (joint DY, BP)
10:15	ZEU 260	BP 2	Protein Structure & Dynamics
10:30	ZEU 222	BP 3	Biopolymers and Biomaterials I (with CPP)
14:00	ZEU 260	BP 4	DNA & DNA Enzymes
14:00	ZEU 250	BP 5	Tissue Dynamics & Developmental Processes
14:00	HÜL 186	BP 6	Statistical Physics of Biological Systems II (joint DY, BP)
17:15	P3	BP 7	Posters: Statistical Physics in Biological Systems
17:15	P3	BP 8	Posters: Protein Structure & Dynamics
17:15	P3	BP 9	Posters: DNA & DNA Enzymes

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BP

17:15	P3	BP 10	Posters: Tissue Dynamics & Developmental Processes
17:15	P3	BP 11	Posters: Single-Molecule Biophysics
17:15	P3	BP 12	Posters: New Technologies
17:15	P3	BP 13	Posters: Biological Membranes
17:15	P3	BP 14	Posters: Neurobiophysics, Theoretical Neuroscience, Sensory Transduction

CPP**Topical Talks**

10:30	ZEU 222	CPP 2.1	Crayfish combine amorphous and crystalline mineral to build a functional tooth structure •Barbara Aichmayer, Shmuel Bentov, Ali Al-Sawalmih, Admir Masic, Paul Zaslansky, Peter Fratzl, Amir Sagi, Amir Berman
14:00	ZEU 222	CPP 5.1	Light harvesting in single polymer chains and inorganic nanostructures •John M. Lupton
15:45	ZEU 160	CPP 6.7	Charge-Controlled Protein Crystallization •Fajun Zhang, Georg Zocher, Andrea Sauter, Marcell Wolf, Felix Roosen-Runge, Thilo Stehle, Frank Schreiber

Sessions

10:30	ZEU 222	CPP 2	Biopolymers and Biomaterials I (jointly with BP)
10:30	ZEU 160	CPP 3	Interfaces and Thin Films I
10:15	HSZ 103	CPP 4	Focus Session "Nanoparticles, Nanocrystals and Colloids" (jointly with MA)
14:00	ZEU 222	CPP 5	Organic Semiconductors I: Solar Cells A (jointly with HL, DS)
14:00	ZEU 160	CPP 6	Charged Soft Matter
14:00	ZEU 114	CPP 7	Interfaces and Thin Films II
17:30	P2	CPP 8	Poster: Organic Semiconductors
17:30	P2	CPP 9	Poster: Biopolymers and Biomaterials
17:30	P2	CPP 10	Poster: Charged Soft Matter
17:30	P2	CPP 11	Poster: New Instruments and Methods

DF**Invited Talks**

10:15	MÜL Elch	DF 1.1	Design and Fabrication of Quantum-Enhanced Capacitors for CMOS-Applications •Jochen Mannhart, Thilo Kopp, Christoph Richter, Lu Li, Ashoori Ray
14:45	MÜL Elch	DF 3.1	Advances of and by phase-field modelling in condensed matter physics •Heike Emmerich

Sessions

10:15	MÜL Elch	DF 1	Dielectric and ferroelectric thin films 1
11:00	KÖN Farb	DF 2	Nonlinear dielectrics, phase transitions, relaxors
14:45	MÜL Elch	DF 3	Dielectric and ferroelectric thin films 2
14:45	HSZ 04	DF 4	Multiferroics I (Joint Session of MA, DF, DS, KR, TT)
17:00	HSZ 04	DF 5	Multiferroics II (Joint Session of MA, DF, DS, KR, TT)

Monday, March 14, 2011

DS

Invited Talks, Topical Talks

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|-------|--------|--------|--|
| 10:15 | GER 37 | DS 1.1 | High-performance liquid- and vacuum-processed CZTSSe photovoltaic devices
•David B. Mitzi, Oki Gunawan, Teodor K. Todorov, Aaron R. Barkhouse, Kejia Wang, Byungha Shin, Richard Haight, Supratik Guha, Kathleen B. Reuter, Thomas Goislar de Monsabert, S. Jay Chey, Andrew J. Kellock |
| 11:00 | GER 37 | DS 2.1 | Cu(In,Ga)Se ₂ , solar cells: the importance of lateral variations of the absorber quality
•Susanne Siebentritt |
| 11:30 | GER 37 | DS 2.2 | Efficient Photovoltaic Devices using Multinary Chalcogenide Semiconductors
•Hans-Werner Schock, Thomas Unold |
| 12:00 | GER 37 | DS 2.3 | From Micro Meter to Mega Watt: Pentanary Chalcopyrite Thin film Solar Cells
Joerg Palm, Alejandro Avellan, •Thomas Dalibor, Stefan Jost, Helmut Vogt, Thomas Niesen, Paul Mogensen, Franz Karg |
| 12:30 | GER 37 | DS 2.4 | Electrical Characterization of Cu(In,Ga)(Se,S) ₂ , -Based Solar Cells at Low Temperatures
•Udo Reislöhner |
| 14:00 | GER 37 | DS 4.1 | Low temperature grown high efficiency Cu(In,Ga)Se ₂ and CdTe flexible solar cells
•Ayodhya Tiwari, Adrian Chirila, Patrick Bloesch, Julian Perrenoud, Krenz Lukas, Sighrad Seyrling, Fabian Pianezzi, Rajneesh Verma, Shioro Nishiwaki, Stephan Buecheler, Yaroslav Romanyuk |
| 14:45 | GER 37 | DS 5.1 | Dünnschicht-Chalkogenid-Solarzellen: Überblick und Forschungsfelder
•Michael Powalla |

Sessions

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|-------|-----------|-------|--|
| 10:15 | GER 37 | DS 1 | Invited – Mitzi |
| 11:00 | GER 37 | DS 2 | Thin Film Chalcogenide Photovoltaics I (Focused Session – Organizer: Ronning) |
| 13:00 | POT 06 | DS 3 | Invited – Böer |
| 14:00 | GER 37 | DS 4 | Invited – Tiwari |
| 14:45 | GER 37 | DS 5 | Thin Film Chalcogenide Photovoltaics II (Focused Session – Organizer: Ronning) |
| 16:00 | GER 37 | DS 6 | Thin Film Chalcogenide Photovoltaics III (Focused Session – Organizer: Ronning) |
| 17:45 | GER 37 | DS 7 | Layer Properties: Electrical, Optical and Mechanical Properties |
| 10:15 | GER 38 | DS 8 | Thin Film Characterisation: Structure Analysis and Composition (XRD, TEM, XPS, SIMS, RBS, ...) I |
| 12:00 | GER 38 | DS 9 | Thin Film Characterisation: Structure Analysis and Composition (XRD, TEM, XPS, SIMS, RBS, ...) II |
| 14:00 | GER 38 | DS 10 | Thin Film Characterisation: Structure Analysis and Composition (XRD, TEM, XPS, SIMS, RBS, ...) III |
| 15:45 | GER 38 | DS 11 | Thin Film Characterisation: Structure Analysis and Composition (XRD, TEM, XPS, SIMS, RBS, ...) IV |
| 17:15 | GER 38 | DS 12 | Layer Deposition Processes |
| 14:00 | ZEU 222 | DS 13 | Organic Electronics and Photovoltaics CPP-I (jointly with CPP, HL, and O) |
| 17:45 | FOE Anorg | DS 14 | Organic Electronics and Photovoltaics HL-I (jointly with CPP, HL, and O) |
| 15:00 | PHY C213 | DS 15 | Plasmonics and Nanophotonics O-I (jointly with HL and O) |
| 17:15 | PHY C213 | DS 16 | Plasmonics and Nanophotonics O-II (jointly with HL and O) |
| 19:15 | GER 38 | | Annual General Meeting of the Thin Films division |
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Monday, March 14, 2011

DY

Invited Talks, Topical Talks

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|-------|---------|---------|---|
| 10:15 | HÜL 186 | DY 1.1 | Dense Inclined Flows of Granular Materials
•James Jenkins |
| 10:45 | HÜL 186 | DY 1.2 | Shear localization and shear alignment in granular flows
•Tamás Börzsönyi, Balázs Szabó, Gábor Törös, Jim N. McElwaine, Robert E. Ecke, Sandra Wegner, Ralf Stannarius |
| 11:15 | HÜL 186 | DY 1.3 | Flow of dense granular suspensions: an experimental study.
•Anke Lindner, Claire Bonnoit, Eric Clement |
| 12:00 | HÜL 186 | DY 1.4 | Erosion and mobility in granular avalanches over sloping beds
•Anne Mangeney, Olivier Roche, Oldrich Hungr, Nicolas Mangold |
| 12:30 | HÜL 186 | DY 1.5 | Confined granular materials: stability, chute flows and grain motion
•Patrick Richard, Jean-Francois Metayer, Alexandre Valance, Renaud Delannay |
| 13:00 | HÜL 186 | DY 1.6 | Convection and segregation of granular mixtures in almost filled containers
•Ralf Stannarius, Frank Rietz |
| 12:45 | ZEU 255 | DY 2.10 | Trends, questions and methods in molecular magnetism
•Jürgen Schnack |
| 14:00 | HÜL 186 | DY 5.1 | Collective dynamics in the cytoskeleton and swimming bacteria
•Falko Ziebert, Sumanth Swaminathan, Shawn Ryan, Leonid Berlyand, Igor Aranson |
| 16:30 | ZEU 255 | DY 6.10 | The multiscale dynamics of lightning and of terrestrial gamma-ray flashes
•Ute Ebert |

Sessions

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|-------|---------|-------|--|
| 10:15 | HÜL 186 | DY 1 | Focus Session: Dense Granular Flow |
| 10:15 | ZEU 255 | DY 2 | Statistical Physics (general) |
| 10:15 | ZEU 250 | DY 3 | Statistical Physics in Biological Systems I (organized by BP) |
| 10:30 | HSZ 03 | DY 4 | Graphene I (organised by TT) |
| 14:00 | HÜL 186 | DY 5 | Statistical Physics of Biological Systems II (organized by DY) |
| 14:00 | ZEU 255 | DY 6 | Quantum Dynamics, Decoherence, and Quantum Information I |
| 14:00 | GÖR 226 | DY 7 | Focus Session: GPU Computing (with SOE) |
| 15:00 | GÖR 226 | DY 8 | Focus Session: GPU Computing – Contributed Talks |
| 14:00 | HSZ 304 | DY 9 | Graphene II (organised by TT) |
| 17:00 | P4 | DY 10 | Posters I |

HL

Invited Talks

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|-------|-----------|---------|---|
| 10:15 | FOE Anorg | HL 1.1 | Self-organized quantum dots as single and entangled photon emitters
•Erik Stock, Waldemar Unrau, Anatol Lochmann, Andrei Schliwa, Murat Öztürk, Askhat Bakarov, Aleksandr Toropov, Ilia Derebrevov, Vladimir Haisler, Dieter Bimberg |
| 12:45 | FOE Anorg | HL 13.1 | Semiconductor quantized current and voltage standard
•Bernd Kaestner |
| 13:00 | POT 06 | HL 14.1 | Why does a thin Layer of CdS on top of CdTe, and other thin-film solar cells improve their efficiency dramatically
•Karl W. Boer |
| 17:00 | POT 51 | HL 27.1 | Intraexciton terahertz nonlinear optics in quantum wells
•Martin Wagner, Harald Schneider, Dominik Stehr, Stephan Winnerl, Aaron M. Andrews, Stephan Schartner, Gottfried Strasser, Manfred Helm |

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HL

Sessions

10:15	FOE Anorg	HL 1	Invited Talk: Erik Stock
10:15	POT 51	HL 2	Electronic Structure Theory
10:15	POT 151	HL 3	III-V-Compounds: GaAs and related Materials
10:15	POT 251	HL 4	Carbon: Diamond, Nanotubes, and Graphene
10:15	POT 06	HL 5	Innovative Systems and Devices
10:30	TRE Ma	HL 6	SKM Symposium: Elementary Processes in Organic Photovoltaics (SYOP)
11:00	FOE Anorg	HL 7	Single Photon Sources and Qbits
11:00	GER 37	HL 8	Joint Focussed Session: Thin Film Chalcogenide Photovoltaics I
11:15	WIL A317	HL 9	Joint Focussed Session: Transparent Conductive Oxides I
11:15	TRE Phy	HL 10	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers I
12:00	POT 51	HL 11	Transport: mainly Theory
12:00	POT 151	HL 12	Quantum Dots and Wires: Arsenides
12:45	FOE Anorg	HL 13	Invited Talk: Bernd Kästner
13:00	POT 06	HL 14	Invited Talk: Karl W. Böer
14:00	ZEU 222	HL 15	Joint Session: Organic Semiconductors I: Solar Cells A
14:30	FOE Anorg	HL 16	Microcavities
14:30	POT 51	HL 17	Nitrides: Growth and Characterization
14:30	POT 151	HL 18	Quantum Hall Effect
14:30	POT 251	HL 19	Silicon and Germanium
14:30	POT 06	HL 20	Innovative Materials
14:30	HSZ 01	HL 21	Symposium: Artificial Optical Materials (SYOM)
14:30	TRE Ma	HL 22	SKM Symposium: Spin Caloric Transport (SYST)
14:45	GER 37	HL 23	Joint Focussed Session: Thin Film Chalcogenide Photovoltaics II
16:00	GER 37	HL 24	Joint Focussed Session: Thin Film Chalcogenide Photovoltaics III
15:45	POT 151	HL 25	Transport
16:00	POT 06	HL 26	Interfaces and Surfaces
17:00	POT 51	HL 27	Invited Talk: Martin Wagner
17:30	POT 51	HL 28	THz Physics
17:45	FOE Anorg	HL 29	Organic Photovoltaics II: mainly Phtalocyanine

KR

Sessions

14:45	HSZ 04	KR 1	Multiferroics I (Joint Session of MA, DF, DS, KR, TT)
17:00	HSZ 04	KR 2	Multiferroics II (Joint Session of MA, DF, DS, KR, TT)

MA

Invited Talks, Topical Talks

10:15	HSZ 04	MA 1.1	Emergent magnetic monopoles and associated Dirac strings in artificial kagome spin ice •Laura Heyderman
10:15	HSZ 103	MA 2.1	Magnetic nanoparticles: fundamentals and applications •Andreas Hütten
10:45	HSZ 103	MA 2.2	Directing the Self-Assembly of Nanoparticles •Alexander Böker
11:15	HSZ 103	MA 2.3	Magnetic Fluids – Properties and Applications •Stefan Odenbach
12:00	HSZ 103	MA 2.4	Semiconductor nanocrystals •Andrey Rogach

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MA

12:30	HSZ 103	MA 2.5	Ion and pH sensing with colloidal nanoparticles: tailoring hybrid FRET-based nanobiosensors •Martin Oheim
14:00	TRE Ma	MA 6.1	Quantifying Spin Hall Effects in Nonmagnetic Metals •Axel Hoffmann
			Sessions
10:15	HSZ 04	MA 1	Micro- and Nanostructured Magnetic Materials I/ Spin Structures – Invited Talk
10:15	HSZ 103	MA 2	Focus Session “Nanoparticles, Nanocrystals and Colloids” (jointly with BP, CPP, HL), Organization: Oleg Petracic (Ruhr-Universität Bochum)
11:00	HSZ 401	MA 3	Bio- and Molecular Magnetism
11:00	HSZ 403	MA 4	Magnetic Coupling Phenomena/ Exchange Bias
11:00	HSZ 04	MA 5	Spin-caloric Transport
14:00	TRE Ma	MA 6	Spin Pumping/ Spin Hall Effects – Invited Talk
14:30	TRE Ma	MA 7	SKM-SYST: Spin Caloric Transport (jointly with TT, HL)
14:45	HSZ 103	MA 8	Magnetic Particles/ Clusters I
14:45	HSZ 401	MA 9	Magnetic Materials I
14:45	HSZ 403	MA 10	Magnetization Dynamics I
14:45	HSZ 04	MA 11	Multiferroics I: Structure and Phase Transitions (jointly with DF, DS, KR, TT), Program coordination: I. Mertig, M. Fiebig
17:00	HSZ 103	MA 12	Magnetic Particles/ Clusters II
17:00	HSZ 401	MA 13	Magnetic Materials II
17:00	HSZ 403	MA 14	Magnetization Dynamics II
17:00	HSZ 04	MA 15	Multiferroics II: Strain and Composites (jointly with DF, DS, KR, TT)

MM

			Invited Talks, Topical Talks
10:15	IFW A	MM 1.1	The physics of nano-carbons explored by atomic resolution transmission electron microscopy •Jannik Meyer, Simon Kurasch, Ute Kaiser, Andrey Chuvilin, Gerardo Algara-Siller, Hye-Jin Park, Viera Skakalova, Siegmund Roth, Cristina Gomez-Navarro, Ravi Sundaram, Marko Burghard, Klaus Kern, Jurgen Smet, Takayuki Iwasaki, Ulrich Starke, Jani Kotakoski, Arkady Krasheninnikov
11:00	IFW A	MM 2.1	Study at picometres precision of structure and properties of oxide ferroelectrics •Chun-Lin Jia
11:30	IFW A	MM 2.2	In-situ TEM as a nanolab for studying electrical and electrochemical transport mechanisms in perovskites •Christian Jooss, Jonas Norpoth, Stephanie Raabe, Malte Scherff, Joerg Hoffmann, James Ciston, Dong Su, Lijun Wu, Yimei Zhu
14:00	IFW A	MM 5.1	In situ transmission electron microscopy of growth processes and chemical reactions Takeshi Kasama, Jörg R. Jinschek, Thomas W. Hansen, Jakob B. Wagner, Zi-An Li, Michael Farle, •Rafal E. Dunin-Borkowski
14:30	IFW A	MM 6.1	Excitation of Surface Plasmon Resonances in Metallic Nanostructures •Peter van Aken, Wilfried Sigle, Burcu Ögüt, Nahid Talebi, Christoph Koch, Ralf Vogelgesang
15:45	IFW A	MM 9.1	Advanced electron microscopy and first-principles calculations: New insights into materials science on the atomic scale •Rolf Erni

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MM

16:15	IFW A	MM 9.2	Quantitative STEM: Composition mapping in InGaN •Andreas Rosenauer, Thorsten Mehrrens, Knut Müller, Katharina Gries, Marco Schowalter, Stephanie Bley, Parlapalli Venkata Satyam, Christian Tessarek, Kathrin Sebald, Moritz Seyfried, Jürgen Gutowski, Adrian Avamescu, Karl Engl, Stephan Lutgen
			Sessions
10:15	IFW A	MM 1	HV Meyer
11:00	IFW A	MM 2	Topical Session TEM I
11:00	IFW B	MM 3	Computational Materials Modelling I
11:00	IFW D	MM 4	Liquid and Amorphous Metals I
14:00	IFW A	MM 5	HV Dunin-Borkowski
14:30	IFW A	MM 6	Topical Session TEM II
14:30	IFW B	MM 7	Computational Materials Modelling II
14:30	IFW D	MM 8	Liquid and Amorphous Metals II
15:45	IFW A	MM 9	Topical Session TEM III
15:45	IFW B	MM 10	Computational Materials Modelling III
15:45	IFW D	MM 11	Liquid and Amorphous Metals III
17:30	P5	MM 12	Postersitzung I

O

			Invited Talks, Topical Talks
10:15	TRE Phy	O 1.1	Chirality at surfaces from the single-molecule perspective •Rasmita Raval
11:15	TRE Phy	O 2.1	Range separation: success, doubts and perspectives •Andreas Savin
11:15	WIL A317	O 4.1	Surface and Bulk Properties of Post-Transition Metal Oxide Semiconductors Philip D.C. King, Sepehr Vasheghani Farahani, Tim D. Veal, •Chris F. McConville
11:45	WIL A317	O 4.2	Ab-initio calculation of electronic and optical properties of transparent conductive oxides •André Schleife, Claudia Rödl, Frank Fuchs, Jürgen Furthmüller, Benjamin Höffling, Karsten Hannewald, Patrick Rinke, Joel Varley, Anderson Janotti, Chris G. Van de Walle, Friedhelm Bechstedt
12:15	WIL A317	O 4.3	Bulk semiconducting oxides: crystal growth and physical properties •Roberto Fornari
14:00	TRE Phy	O 9.1	Ultrafast nanooptical control •Walter Pfeiffer, Tobias Brixner, Martin Aeschlimann
			Sessions
10:15	TRE Phy	O 1	Invited Talk (Rasmita Raval)
11:15	TRE Phy	O 2	Focussed session: Theory and computation of electronic structure: new frontiers I (jointly with HL, DS)
11:15	PHY C213	O 3	Metal substrates: Adsorption of organic / bio molecules I
11:15	WIL A317	O 4	Focussed session: Transparent conductive oxides I (jointly with HL, DS)
11:15	WIL B321	O 5	Spin-Orbit Interaction at Surfaces I
11:15	WIL B122	O 6	Semiconductor substrates: Adsorption
11:15	WIL C107	O 7	Surface Dynamics I
11:15	WIL C307	O 8	Oxides and insulators: Adsorption I
14:00	TRE Phy	O 9	Invited Talk (Walter Pfeiffer)
15:00	TRE Phy	O 10	Metal substrates: Adsorption of organic / bio molecules II
15:00	PHY C213	O 11	Plasmonics and Nanooptics I

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15:00	WIL A317	O 12	Metal substrates: Adsorption of O / H and inorganic molecules I
15:00	WIL B321	O 13	Solid / liquid interfaces I
15:00	WIL B122	O 14	Clean surfaces: Metals, semiconductors, oxides and insulators I
15:00	WIL C107	O 15	Nanostructures at surfaces: Dots, particles, clusters, arrays I
15:00	WIL C307	O 16	Scanning probe methods I
17:15	TRE Phy	O 17	Metal substrates: Adsorption of organic / bio molecules III
17:15	PHY C213	O 18	Plasmonics and Nanooptics II
17:15	WIL A317	O 19	Metal substrates: Adsorption of O / H and inorganic molecules II
17:15	WIL B321	O 20	Solid / liquid interfaces II
17:15	WIL B122	O 21	Clean surfaces: Metals, semiconductors, oxides and insulators II
17:15	WIL C107	O 22	Theoretical methods
17:15	WIL C307	O 23	Scanning probe methods II

SOE

			Prize Talk, Invited Talks, Topical Talk
10:15	GÖR 226	SOE 2.1	Social Media and Attention •Bernardo Huberman
10:45	GÖR 226	SOE 2.2	Mobilizing society with a red balloon •Riley Crane
11:15	GÖR 226	SOE 2.3	Collective behaviour and swarm intelligence •Jens Krause
13:30	GÖR 226	SOE 4.1	The FuturICT Knowledge Accelerator: Introduction to a EU Flagship project on techno-socio-economic systems •Dirk Helbing
14:00	GÖR 226	SOE 5.1	Applications of GPU-Computing in Statistical Physics •Peter Virnau
14:30	GÖR 226	SOE 5.2	Accelerating Monte Carlo Simulations in Statistical Physics with GPU's •David Landau, Junqi Yin
17:00	HSZ 02	SOE 8.1	Dragon-kings versus black swans: diagnostics and forecasts for the on-going world financial crisis •didier Sornette
18:00	HSZ 02	SOE 8.2	Community structure in networks and statistical physics of social dynamics •Santo Fortunato
			Sessions
10:15	GÖR 226	SOE 2	Focus Session: Swarm Intelligence
12:00	GÖR 226	SOE 3	Focus Session: Swarm Intelligence – Contributed Talks
13:30	GÖR 226	SOE 4	Special Announcement: Funding Opportunities
14:00	GÖR 226	SOE 5	Focus Session: GPU Computing (with DY)
15:00	GÖR 226	SOE 6	Focus Session: GPU Computing (with DY) – Contributed Talks
16:00	GÖR 226	SOE 7	Social Systems, Opinion and Group Dynamics I
17:00	HSZ 02	SOE 8	Award Ceremony: Young Scientist Award for Socio- and Econophysics

TT

			Invited Talks, Topical Talks
10:30	HSZ 03	TT 1.1	Spin-orbit coupling in graphene: single layer, bilayer, trilayer, and graphite •Jaroslav Fabian
14:00	HSZ 03	TT 6.1	Magnetolyte Properties of Spin Ice •Steve Bramwell

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TT

14:45	HSZ 03	TT 6.2	Kitaev-Heisenberg Model on a Honeycomb Lattice: Possible Exotic Phases in Iridium Oxides $A_2\text{IrO}_3$ •George Jackeli, Jiri Chaloupka, Giniyat Khaliullin
15:45	HSZ 03	TT 6.3	Disorder in a quantum spin liquid: flux binding and local moment formation Adam Willans, •John Chalker, Roderich Moessner
16:30	HSZ 03	TT 6.4	Fractional spin textures in the frustrated magnet $\text{SrCr}_9\text{pGa}_{12-9}\text{pO}_{19}$ •Kedar Damle, Roderich Moessner, Arnab Sen
17:15	HSZ 03	TT 6.5	Quantum Criticality and E8 symmetry in an Ising Chain •Alan Tennant

Sessions

10:30	HSZ 03	TT 1	TR: Graphene 1 (jointly with MA, HL, and DY)
10:30	HSZ 301	TT 2	SC: Properties, Electronic Structure, Mechanisms 1
10:30	HSZ 304	TT 3	CE: Charge Density Wave & Peierls Instability
10:30	HSZ 201	TT 4	CE: Quantum-Critical Phenomena 1
10:30	HSZ 02	TT 5	Micro Mechanical Oscillator 1 (jointly with Q)
14:00	HSZ 03	TT 6	Focused Session: Frontiers in Classical and Quantum Spin Liquids
14:00	HSZ 301	TT 7	SC: Properties, Electronic Structure, Mechanisms 2
14:00	HSZ 304	TT 8	TR: Graphene 2 (jointly with MA, HL, and DY)
14:00	HSZ 201	TT 9	CE: (General) Theory 1
14:00	P4	TT 10	Poster Session: Superconductivity
14:00	P4	TT 11	Poster Session: Matter at Low Temperature
14:30	HSZ 02	TT 12	Micro Mechanical Oscillator 2 (jointly with Q)
14:45	HSZ 04	TT 13	Multiferroics I (jointly with DF, DS, KR, MA)
17:00	HSZ 04	TT 14	Multiferroics II (jointly with DF, DS, KR, MA)
16:30	HSZ 301	TT 15	SC: Fabrication and Characterization
18:15	HSZ 03	TT 16	TR: Nanoelectronics III – Molecular Electronics 1
18:15	HSZ 301	TT 17	SC: Fe-based Superconductors – 1111
18:30	HSZ 201	TT 18	CE: Low-dimensional Systems – Materials 1
18:45	HSZ 304	TT 19	CE: Quantum Impurities, Kondo Physics

VA

Invited Talk

10:00	HSZ 101	VA 1.1	Cryogenic pumping for the fabrication of highest-purity semiconductors •Werner Wegscheider
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Sessions

10:00	HSZ 101	VA 1	Cryogenic Vacuum Pumping
11:00	HSZ 101	VA 2	Gas Flow Simulation
14:00	HSZ 101	VA 3	KATRIN Vacuum Systems
15:20	HSZ 101	VA 4	Vacuum Control and Monitoring
16:10	HSZ 101		Annual General Meeting of the Vacuum Science and Technology division

SKM-SYOP

Invited Talks

10:30	TRE Ma	SKM-SYOP 1.1	Charge separation in organic solar cells and the principle of detailed balance •Uwe Rau, Thomas Kirchartz
11:00	TRE Ma	SKM-SYOP 1.2	Three-Dimensional Nanoscale Organization of Bulk Heterojunction Polymer Solar Cells •Joachim Loos

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SKM-SYOP

- 11:30 TRE Ma SKM-SYOP 1.3 Reliable prediction of charge transfer excitations using optimally tuned range-separated hybrid functionals
•Leeor Kronik
- 12:00 TRE Ma SKM-SYOP 1.4 Charge separation and recombination in organic solar cells
•James Durrant
- 12:30 TRE Ma SKM-SYOP 1.5 Efficient and stable organic vacuum deposited p-i-n-type tandem solar cells
•Martin Pfeiffer
- Session**
- 10:30 TRE Ma SKM-SYOP 1 Elementary Processes in Organic Photovoltaics
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SKM-SYST

- Invited Talks**
- 14:30 TRE Ma SKM-SYST 1.1 On the theory of the spin wave Seebeck effect
•Gerrit Bauer
- 15:00 TRE Ma SKM-SYST 1.2 Spin Seebeck effect in metals and insulators
•Ken-ichi Uchida, Eiji Saitoh
- 15:30 TRE Ma SKM-SYST 1.3 Spin-Seebeck effect: Local nature of thermally induced spin currents in GaMnAs
•Roberto Myers
- 16:00 TRE Ma SKM-SYST 1.4 Heat conduction of low-dimensional quantum magnets
•Christian Hess, Nikolai Hlubek, Patrick Ribeiro, Bernd Büchner, Surjeet Singh, Romuald Saint-Martin, Alexandre Revcolevschi
- 16:30 TRE Ma SKM-SYST 1.5 Evidence of spin polarized heat current acting on magnetization
•Jean-Philippe Ansermet
- Session**
- 14:30 TRE Ma SKM-SYST 1 Spin Caloric Transport
- Job Market**
- 13:00 HSZ E05 Carl Zeiss:
„Visionäre mit Weitblick gesucht“
- 14:30 HSZ E05 McKinsey & Company Inc.:
„Physiker bei McKinsey – was Sie in einer Top-Management-Beratung erwartet“
- 16:00 HSZ E05 Physikalisch-Technische Bundesanstalt:
„Wir machen die Zeit... und mehr. Machen Sie mit! Arbeiten in der Physikalisch-Technischen Bundesanstalt“
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- 18:00 HSZ 101 **Annual General Meeting of the Deutsche Physikalische Gesellschaft**
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Tuesday, March 15, 2011

			Plenary Talks, Plenary Talk (GP), Plenary Talk (SAMOP), Plenary Talk (SKM), Prize Talks
08:30	HSZ 01	PV V	Status, Progress, and Future of the Green Semiconductor Laser •Shuji Nakamura
09:15	HSZ 04	PV VI	Physik vor dem Eisernen Vorhang •Walter Thirring
09:15	HSZ 02	PV VII	Interactions of ions, atoms, and photons with surfaces and capillaries •Joachim Burgdörfer
09:15	HSZ 01	PV VIII	Computational Design of New Multifunctional Materials: From Magnetoelectronics to a Theory of Everything. •Nicola Spaldin
13:30	HSZ 03	PV IX	Honey, I shrunk the laser! •Martina Hentschel (Laureate of the Hertha-Sponer-Prize 2011)
14:00	HSZ 03	PV X	Theoretical progresses in off-equilibrium behavior •Giorgio Parisi (Laureate of the Max-Planck-Medal 2011)
15:30	HSZ 01		Ceremonial Session and Award Ceremony <i>(Please see complete program on page 18 in this booklet)</i>
17:00	HSZ 01	PV XI	Information and the Foundations of Quantum Mechanics: From Einstein's Spook and Schroedinger's Cat to Quantum Information Technology and back •Anton Zeilinger

SYCE

			Invited Talks
10:30	HSZ 01	SYCE 1.1	Oceanic carbon-dioxide removal options: Potential impacts and side effects •Andreas Oschlies
11:00	HSZ 01	SYCE 1.2	Climate Engineering through injection of aerosol particles into the atmosphere: physical insights into the possibilities and risks •Mark Lawrence
11:30	HSZ 01	SYCE 1.3	Geoengineering – will it change the climate game? •Timo Goeschl
12:00	HSZ 01	SYCE 1.4	The gamble with the climate – an experiment •Manfred Milinski
10:30	HSZ 01	SYCE 1	Session Foundations and Perspectives of Climate Engineering

ISS

			Sessions
10:30	HSZ 02	ISS 3	Solid State Photon Sources (Q, HL)
18:00	P1	ISS 4	Intersectional Poster Session

GP

			Invited Talk
14:00	HSZ 204	GP 7.1	Cold War and the Nobel Prizes in Physics: From Molecular Beams to the Bubble Chamber •Karl Grandin

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GP

Sessions

09:15	HSZ 04	GP 4	Plenarvortrag Physik vor dem Eisernen Vorhang
10:10	HSZ 204	GP 5	Verantwortung
11:45	HSZ 204	GP 6	Militärische Kontexte
14:00	HSZ 204	GP 7	Nobelpreis
14:40	HSZ 204	GP 8	Ultrazentrifuge
18:15	HSZ 204	GP 9	Freie Themen

MI

Invited Talk

09:30	BEY 81	MI 5.1	Röntgenspektroskopie an hochgeladenen Ionen •Günter Zschornack
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Session

09:30	BEY 81	MI 5	X-Ray Spectrometry and Tomography
13:30	BEY 81		Annual General Meeting of the Microprobes division

ST

Sessions

10:00	POT 112	ST 3	Radiation Therapy II: Electrons, Lasers, Radionuclides
11:30	POT 112	ST 4	Imaging with Non-Ionizing Radiation

UP

Session

13:30	HSZ 201		Annual General Meeting of the Environmental Physics division
18:30	P2	UP 1	Poster Session

AKE

Session

10:30	HSZ 01	AKE 6	Intersectional Symposium Foundations and Perspectives of Climate Engineering (jointly with UP and SOE)
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AGjDPG

Invited Talks

10:30	HSZ 201	AGjDPG 3.1	Quo vadis Bionik? Möglichkeiten und Grenzen naturinspirierter Technologie •Christoph Neinhuis
11:00	HSZ 201	AGjDPG 3.2	Mikrostrukturierte Haftoberflächen – Vom Vorbild Natur zu praktischen Anwendungen •Eduard Arzt, Dadhichi Paretkar, Elmar Kroner
11:40	HSZ 201	AGjDPG 3.3	Plant movements and biomimetic actuators •Peter Fratzl, Sebastien Turcaud, John Dunlop, Matt Harrington, Ingo Burgert

Session

10:30	HSZ 201	AGjDPG 3	Biophysics I: Bionics and Biomaterials (with BP)
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Tuesday, March 15, 2011

AGPhil

11:15 BEY 154 AGPhil 4.1
Invited Talk
Lässt die Physik Kausalbeziehungen zu?
•Andreas Hüttemann

10:00 BEY 154 AGPhil 3
11:15 BEY 154 AGPhil 4
Sessions
Reduktion physikalischer Theorien
Kausalität

A

10:30 BAR 205 A 9.1
Invited Talks
Ultraintense X-Ray Induced Multiple Ionization and Double Core-Hole Production in Molecules
•Nora Berrah, Mats Larsson, Raymond Feifel, Kiyoshi Ueda, Kevin Prince
11:00 BAR 205 A 9.2
Experiments at SPring-8 FEL: from EUV to X rays
•Kiyoshi Ueda
11:30 BAR 205 A 9.3
Coupling dependence regarding the Cooper minima positions in two-photon ionization of rare gases
•Markus Braune, Toralf Lischke, Ande Meissner, Markus Ilchen, Sascha Deinert, Jens Viefhaus, Andre Knie, Uwe Becker
14:00 BAR 106 A 12.1
Dissociative charge transfer into molecular ions
•Lothar Ph. H. Schmidt, Reinhard Dörner, Horst Schmidt-Böcking

Sessions
10:30 BAR 205 A 9 Interaction with VUV and X-ray light (FEL) II
10:30 BAR 106 A 10 Ultra-cold atoms, ions and BEC II (with Q)
14:00 BAR 205 A 11 Precision spectroscopy of atoms and ions III
14:00 BAR 106 A 12 Interaction of matter with ions I
18:00 P1 A 13 Poster II

MO

10:30 TOE 317 MO 9.1
Invited Talk
Transient generation of carbonic acid in the context of the aqueous chemistry of carbon dioxide
Katrín Adamczyk, Mirabelle Prémont-Schwarz, Dina Pines, Ehud Pines,
•Erik T. J. Nibbering

Sessions
10:30 TOE 317 MO 9 Femtosecond Spectroscopy II
10:30 MER 02 MO 10 Cluster
18:00 P1 MO 11 Poster: Transport and Spectroscopy in Molecular Nanostructures (Intersectional Session with CPP)

MS

10:30 GÖR 229 MS 4.1
Invited Talks
On the interconversion of an ion's motional modes in a Penning trap by quadrupolar and octupolar rf-fields
•Martin Kretzschmar
11:00 GÖR 229 MS 4.2
High-precision Penning trap mass spectrometry for neutrino physics
•sergey eliseev, christine böhm, klaus blaum, andreas dörr, mikhail goncharov, yuri novikov, julia repp, christian roux

Tuesday, March 15, 2011

MS

10:30	GÖR 229	MS 4	Session Precision Mass Spectrometry and Fundamental Applications
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Q

10:30	HSZ 02	Q 16	Sessions Solid State Photon Sources
10:30	BAR Schön	Q 17	Fermi Quantum Gas
10:30	BAR 106	Q 18	Ultra-cold atoms, ions and BEC II
10:30	HÜL 386	Q 19	Quantum Gases: Miscellaneous
10:30	SCH A118	Q 20	Quantum Information: Concepts and Methods 3
10:30	SCH A215	Q 21	Laserentwicklung: Festkörperlaser 2
10:30	SCH A01	Q 22	Ultrakurze Laserpulse: Anwendungen 1
18:00	P1	Q 23	Poster 2: Intersectional Session

SAMOP-DP

10:30	MENSA Dül	SAMOP-DP 1.1	Invited Talks Rovibronic ground state molecules near quantum degeneracy •Johann Georg Danzl
11:00	MENSA Dül	SAMOP-DP 1.2	Manipulation of Large Neutral Molecules with Electric Fields •Frank Filsinger
11:30	MENSA Dül	SAMOP-DP 1.3	Entanglement in spinor Bose-Einstein condensates •Christian Gross, Tilman Zibold, Eike Nicklas, Helmut Strobel, Jiri Tomkovic, Markus K Oberthaler
12:00	MENSA Dül	SAMOP-DP 1.4	State-selective transport of single neutral atoms •Michal Karski

10:30	MENSA Dül	SAMOP-DP 1	Session S-AMOP Dissertation Prize Symposium
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BP

10:15	ZEU 250	BP 15.1	Invited Talks Single-molecule mechanics: theory, analysis, interpretation •Olga Dudko
10:15	ZEU 260	BP 16.1	The dynamic organization in the membrane of a G-protein-coupled receptor is related to its functional state •Laurence Salomé
14:00	ZEU 250	BP 18.1	Amyloid at the nanoscale: single molecule and ensemble studies of amyloid-lipid interactions •Vinod Subramaniam

10:15	ZEU 250	BP 15	Sessions Single-Molecule Biophysics I
10:15	ZEU 260	BP 16	Biological Membranes I
10:30	HSZ 201	BP 17	Biophysics I: Bionics and Biomaterials (joint AG jDPG, BP)
14:00	ZEU 250	BP 18	Single-Molecule Biophysics II
14:00	ZEU 260	BP 19	Biological Membranes II

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CPP

Invited Talks, Topical Talks

10:30	ZEU 222	CPP 12.1	Modelling charge transport in organic semiconductors •Denis Andrienko
10:30	ZEU 160	CPP 13.1	Rheological Response of Ultrathin Polymer Films •Gregory McKenna, Paul O'Connell, Jinhua Wang
11:00	ZEU 160	CPP 13.2	Molecular dynamics at nanometric length-scales •Friedrich Kremer
11:30	ZEU 160	CPP 13.3	On the origin of the deviations from bulk behavior in ultrathin polymer films: from glass transition to tracer diffusivity •Simone Napolitano, Michael Wübbenhorst, Cinzia Rotella
12:00	ZEU 160	CPP 13.4	Calorimetry of Thin Films – From Single Layer Glass Transitions to Inter-layer Diffusion in Double Layers •Christoph Schick, Dongshan Zhou, Heiko Huth
10:30	ZEU 114	CPP 14.1	Network effects in nano-filled polymer systems •Kay Saalwächter, Cornelius Franz, Kerstin Schärer, Salim Ok, Martin Steinhart, Aurelie Papon, Francois Lequeux, Helene Montes
14:00	ZEU 160	CPP 16.1	Glass Transition Dynamics of Polymer Films •Ophelia K. C. Tsui
14:30	ZEU 160	CPP 16.2	Conformational properties of polymer melts in spatial confinement Hendrik Meyer, Albert Johner, Joachim Wittmer, Julia Zabel, Jean Farago, •Jörg Baschnagel
14:00	ZEU 114	CPP 17.1	Modulated mesophases: from labyrinths to liquid ferroelectric chords. •Alexey Eremin, Ulrike Kornek, Ralf Stannarius, Antal Jáklí, Hideo Takezoe

Sessions

10:30	ZEU 222	CPP 12	Organic Semiconductors II: Solar Cells B (jointly with HL, DS)
10:30	ZEU 160	CPP 13	Focused Session: Confinement of Polymers in Nanoscopic Layers – How Much do Properties Change? I
10:30	ZEU 114	CPP 14	Elastomers and Gels
14:00	ZEU 222	CPP 15	Organic Semiconductors III: Aggregation and Nanostructures (jointly with HL, DS)
14:00	ZEU 160	CPP 16	Focused Session: Confinement of Polymers in Nanoscopic Layers – How Much do Properties Change? II
14:00	ZEU 114	CPP 17	Liquid Crystals
18:00	P1	CPP 18	Poster: Transport and Spectroscopy in Molecular Nanostructures (Intersectional Session with MO)
18:00	P2	CPP 19	Poster: Interfaces and Thin Films
18:00	P2	CPP 20	Poster: Computational Soft Matter Physics
18:00	P2	CPP 21	Poster: Confinement of Polymers in Nanoscopic Layers – How Much do Properties Change?
18:00	P2	CPP 22	Poster: Glass Transition and Dynamics of Liquids
18:00	P2	CPP 23	Poster: Semicrystalline Polymers, Polymer Crystallization and Self-Assembly
18:00	P2	CPP 24	Poster: Polymer Dynamics

DF

Invited Talk

10:15	MÜL Elch	DF 6.1	Ultrafast X-ray Diffraction and all-optical Pump-Probe Spectroscopy on Oxide Multilayers •Matias Bargheer
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DF

Sessions

10:15	MÜL Elch	DF 6	Optical and nonlinear optical properties, photonic
10:15	HSZ 04	DF 7	Multiferroics III (Joint Session of MA, DF, DS, KR, TT)
10:45	HSZ 04	DF 8	Multiferroics IV (Joint Session of MA, DF, DS, KR, TT)
13:45	GER 38	DF 9	High-k and Low-k Dielectrics (Joint Session of DS, DF)

DS

Invited Talks, Topical Talks

10:15	GER 37	DS 17.1	Chemical Nanolithography •Michael Grunze, Michael Zharnikov
11:00	GER 37	DS 18.1	Microcontact chemistry: surface reactions in nanoscale confinement •Bart Jan Ravoo
11:30	GER 37	DS 18.2	Electrochemical Microstructuring •Rolf Schuster, Xinzhou Ma, Vadym Halka
12:00	GER 37	DS 18.3	Electrochemical Oxidation and Anodization Lithography on Self-Assembled Monolayers •Stephanie Hoepfner
12:30	GER 37	DS 18.4	Surface Structuring by Single Pulse Laser Interference: Principles and Applications •Johannes Boneberg
14:00	GER 37	DS 19.1	Laser micro- and nanoprocessing •Boris Chichkov

Sessions

10:15	GER 37	DS 17	Invited – Grunze
11:00	GER 37	DS 18	Progress in Micro- and Nanopatterning: Techniques and Applications I (Focused Session, jointly with O – Organizers: Graaf, Hartmann)
14:00	GER 37	DS 19	Invited – Chichkov
10:15	GER 38	DS 20	Application of Thin Films
13:45	GER 38	DS 21	High-k and Low-k Dielectrics (jointly with DF)
10:15	POT 151	DS 22	Focussed Session: Inorganic/Organic Semiconductor Hybrid Structures I (jointly with HL and O)
14:15	POT 151	DS 23	Focussed Session: Inorganic/Organic Semiconductor Hybrid Structures II (jointly with HL and O)
10:30	ZEU 222	DS 24	Organic Electronics and Photovoltaics CPP-II (jointly with CPP, HL, and O)
14:00	ZEU 222	DS 25	Organic Electronics and Photovoltaics CPP-III (jointly with CPP, HL, and O)
11:15	WIL A317	DS 26	Plasmonics and Nanophotonics O-III (jointly with HL and O)

DY

Invited Talks, Topical Talks

10:00	HÜL 186	DY 11.1	Doing small systems: Concepts, Role of Ensembles, Thermalization and Fluctuation Theorems •Peter Hänggi
10:30	HÜL 186	DY 11.2	Microcanonical singularities in finite systems •Jörn Dunkel, Stefan Hilbert
11:00	HÜL 186	DY 11.3	Recent progress in fluctuation theorems and free energy recovery •Felix Ritort
11:45	HÜL 186	DY 11.4	Efficiencies and fluctuations in small out-of-equilibrium devices •Massimiliano Esposito

Tuesday, March 15, 2011

DY

12:15	HÜL 186	DY 11.5	Quantum Fluctuation Theorems •Michele Campisi
12:45	HÜL 186	DY 11.6	Time-reversal symmetry relations: From the multibaker map to open quantum systems •Pierre Gaspard
12:45	ZEU 255	DY 12.10	Non-equilibrium quantum relaxation, thermalization and boundary effects •Heiko Rieger, Ferenc Iglói
10:15	ZEU 118	DY 13.1	Aggregation and Fragmentation of fractal-like particles in synthetic turbulent flows •Ulrike Feudel, Jens Zahnow, Joeran Maerz
			Sessions
10:00	HÜL 186	DY 11	Focus Session: Thermodynamics and Statistical Physics of Small Systems
10:15	ZEU 255	DY 12	Quantum Dynamics, Decoherence, and Quantum Information II
10:15	ZEU 118	DY 13	Fluid Dynamics and Turbulence I
14:00	ZEU 255	DY 14	Delay Dynamics
18:00	P1	DY 15	ISPS Intersectional Poster Session

HL

			Invited Talks
10:15	POT 151	HL 32.1	Self-assembled monolayers on zinc oxide •Craig L. Perkins
10:45	POT 151	HL 32.2	Inorganic/organic semiconductor heteroepitaxy – towards new hybrid systems for optoelectronics and photonics •Sylke Blumstengel
11:30	POT 151	HL 32.3	Electrostatic Field Driven Alignment of Organic Oligomers on ZnO Surfaces •Fabio Della Sala, Sylke Blumstengel, Fritz Henneberger
12:00	POT 151	HL 32.4	The incorporation of metal nanostructures at organic/inorganic semiconductor interfaces •Dietrich RT Zahn, Michael Ludemann, Ovidiu Gordan, Philipp Schäfer, Georgeta Salvan
14:15	POT 151	HL 42.1	Interfacial charge-carrier energetics probed by electromodulated absorption spectroscopy: implication for organic-inorganic hybrid photovoltaic devices •Peter Ho
14:45	POT 151	HL 42.2	Organic layers on Si, SiC, and diamond substrates: structural and electronic properties •Martin Stutzmann, Ian D. Sharp, Jose Antonio Garrido, Martin S. Brandt
			Sessions
10:15	FOE Anorg	HL 30	Nano Wires: Growth and Characterization
10:15	POT 51	HL 31	III-V-Compounds: Nitrides
10:15	POT 151	HL 32	Focussed Session: Inorganic/Organic Semiconductor Hybrid Structures I
10:15	POT 251	HL 33	Spin-dependent Transport I
10:30	HSZ 02	HL 34	Joint Session: Solid State Photon Sources
10:30	ZEU 222	HL 35	Joint Session: Organic Semiconductors II: Solar Cells B
11:15	WIL B122	HL 36	Joint Focussed Session: Transparent Conductive Oxides II
11:15	TRE Phy	HL 37	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers II
12:00	FOE Anorg	HL 38	Polaritons and Polariton Lasing

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HL

13:30	FOE Anorg	HL 39	Photovoltaics: Chalcopyrites I
14:00	ZEU 222	HL 40	Joint Session: Organic Semiconductors III: Aggregation and Nanostructures
14:15	POT 51	HL 41	Nitrides: InGaN
14:15	POT 151	HL 42	Focussed Session: Inorganic/Organic Semiconductor Hybrid Structures II
14:30	POT 251	HL 43	Spin-dependent Transport II
18:00	P3	HL 44	Poster Session I
18:00	P1	HL 45	Joint Poster Session

KR

Sessions

10:15	HSZ 04	KR 3	Multiferroics III (Joint Session of MA, DF, DS, KR, TT)
10:45	HSZ 04	KR 4	Multiferroics IV (Joint Session of MA, DF, DS, KR, TT)
10:45	P2	KR 5	Poster Multiferroics (Joint Session of MA, DF, DS, KR, TT)

MA

Invited Talk

10:15	HSZ 04	MA 16.1	Search for a permanent electric dipole moment of an electron: Multiferroics bring us a step closer •Marjana Ležaić
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Sessions

10:15	HSZ 04	MA 16	Multiferroics III: Exotic Properties – Invited Talk (jointly with DF, DS, KR, TT)
10:30	TRE Ma	MA 17	SKM Dissertation Prize
10:45	HSZ 04	MA 18	Multiferroics IV: Exotic Properties and Dynamics (jointly with DF, DS, KR, TT)
10:45	P2	MA 19	Poster I (Bio- and Molecular Magnetism/ Magnetic Particles and Clusters/ Micro- and Nanostructured Magnetic Materials/ Magnetic Materials/ Multiferroics/ Magnetic Shape Memory Alloys/ Electron Theory of Magnetism/ Spincaloric Transport/ Magnetic Coupling and Exchange Bias/ Magnetization Dynamics/ Micromagnetism and Computational Magnetics)
11:00	HSZ 103	MA 20	Electron Theory of Magnetism
11:00	HSZ 401	MA 21	Bio- and Molecular Magnetism II
11:00	HSZ 403	MA 22	Magnetic Measurement Methods
12:15	HSZ 04	MA 23	Magnetic Shape Memory Alloys I (jointly with MM)
13:30	HSZ 04	MA 24	ThyssenKrupp Dissertations-Preis 2011 der AG Magnetismus
13:30	HSZ 103	MA 25	Magnetic Shape Memory Alloys II (jointly with MM)

MM

Invited Talk, Topical Talks

10:15	IFW A	MM 13.1	Plasticity in confined volumes: new insights into small-scale plasticity •Christian Motz
11:00	IFW A	MM 14.1	Transmission Electron Microscopy at 20 kV for Imaging and Spectroscopy – Current Status and Future Prospects •U. Kaiser, J. Biskupek, J.C. Meyer, J. Leschner, L. Lechner, Z. Lee, S. Kurasch, U. Golla-Schindler, M. Kinyanjui, H. Rose, M. Stöger-Pollach, A.N. Khlobystov, M. Haider, P. Hartel, H. Müller, S. Eyhusen, G. Benner

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MM

11:30	IFW A	MM 14.2	Quantification of instrumental properties in high-resolution transmission electron microscopy •Juri Barthel, Andreas Thust
14:00	IFW A	MM 17.1	New Electrostatic Phase Plate for Phase-Contrast Transmission Electron Microscopy and Its Application for Wave-Function Reconstruction Björn Gamm, Katrin Schultheiss, Joachim Zach, Manuel Dries, Nicole Frindt, Rasmus R. Schröder, •Dagmar Gerthsen

Sessions

10:15	IFW A	MM 13	HV Motz
11:00	IFW A	MM 14	Topical Session TEM IV
11:00	IFW B	MM 15	Computational Materials Modelling IV
11:00	IFW D	MM 16	Structural Materials
14:00	IFW A	MM 17	Topical Session TEM V
14:00	IFW B	MM 18	Mechanical Properties I
14:00	IFW D	MM 19	Transport

O

Invited Talks, Topical Talks

10:15	TRE Phy	O 24.1	Low Energy Electron Microscopy Studies of Thin Film Graphene Growth and Properties •Rudolf M. Tromp
11:15	TRE Phy	O 26.1	Electronic and Optical Excitations in Magnetic Insulators •Claudia Rödl, Frank Fuchs, Friedhelm Bechstedt
11:15	WIL B122	O 30.1	Experimental Electronic Structure of In_2O_3 and Ga_2O_3 •Christoph Janowitz
11:45	WIL B122	O 30.2	Transparent Electronics Using Oxide Materials •Marius Grundmann
12:15	WIL B122	O 30.3	Optical properties of undoped and doped ZnO •Axel Hoffmann, Markus R. Wagner
14:00	TRE Phy	O 33.1	Competition of magnetic excitations on a superconducting surface •Katharina J. Franke
14:45	TRE Phy	O 34.1	A Bottom-up View of Sliding Friction: From Hopping Atoms to Superlubric Nanoparticles •Andre Schirmeisen

Sessions

10:15	TRE Phy	O 24	Invited Talk (Rudolf M. Tromp)
11:00	GER 37	O 25	[DS] Progress in Micro- and Nanopatterning: Techniques and Applications I (Focused Session, jointly with O – Organisers: Graaf, Hartmann)
11:15	TRE Phy	O 26	Focussed session: Theory and computation of electronic structure: new frontiers II (jointly with HL, DS)
11:15	PHY C213	O 27	Metal substrates: Adsorption of organic / bio molecules IV
11:15	WIL A317	O 28	Plasmonics and Nanooptics III
11:15	WIL B321	O 29	Graphene I
11:15	WIL B122	O 30	Focussed session: Transparent conductive oxides II (jointly with HL, DS)
11:15	WIL C107	O 31	Nanostructures at surfaces: Dots, particles, clusters, arrays II
11:15	WIL C307	O 32	Spin-Orbit Interaction at Surfaces II
14:00	TRE Phy	O 33	Invited Talk (Katharina J. Franke)
14:45	TRE Phy	O 34	Invited Talk (Andre Schirmeisen)
18:30	P3	O 35	Poster Session I (Scanning probe methods)

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18:30 P4 O 36 Poster Session II (Metals; Nanostructures at surfaces; Surface or interface magnetism; Spin-Orbit Interaction at Surfaces; Electron and spin dynamics; Surface dynamics; Methods; Theory and computation of electronic structure)

SOE

Invited Talks

13:30 GÖR 226 SOE 10.1 Complex Economic Systems in the Laboratory
•Cars Hommes

14:00 GÖR 226 SOE 10.2 Multiplicative Cascades: How to model trip within cities
•Marta C. González

14:30 GÖR 226 SOE 10.3 Human behavior on networks: lessons and perspectives from game theory
Jelena Grujic, Constanza Fosco, Lourdes Araujo, José A. Cuesta, •Angel Sánchez

15:00 GÖR 226 SOE 10.4 Measuring Happiness
•Peter S. Dodds

Sessions

10:30 HSZ 01 SOE 9 Foundations and Perspectives of Climate Engineering (with AKE and UP)

13:30 GÖR 226 SOE 10 Focus Session: Experimental Methods

18:00 P2 SOE 11 Poster Session

18:45 GÖR 226 SOE 12 Annual General Meeting of the Physics of Socio-economic Systems division

TT

Invited Talks

10:30 HSZ 03 TT 20.1 The discovery of fluxoid quantization: $2e$ or not $2e$
•Dietrich Einzel

11:00 HSZ 03 TT 20.2 Fluxoid Quantization and the Superconducting Quantum Interference Device
•John Clarke

11:40 HSZ 03 TT 20.3 Flux Quantization driving Fractional Flux Quantum Generation
•Hans Hilgenkamp

12:10 HSZ 03 TT 20.4 Quantum information with quantized fluxoids: flux qubits
•Johan E. Mooij

12:40 HSZ 03 TT 20.5 Flux quantization and the quantum Hall effect
•Klaus von Klitzing

14:00 HSZ 301 TT 26.1 Quantum paradoxes in quantum transport
•Wolfgang Belzig, Adam Bednorz

Sessions

10:30 HSZ 03 TT 20 Focused Session: 50 Years of Flux Quantization

10:30 HSZ 301 TT 21 TR: Nanoelectronics III – Molecular Electronics 2

10:30 HSZ 304 TT 22 CE: Low-dimensional Systems – Materials 2

10:30 HSZ 105 TT 23 CE: Quantum-Critical Phenomena 2

10:15 HSZ 04 TT 24 Multiferroics III (jointly with DF, DS, KR, MA)

10:45 HSZ 04 TT 25 Multiferroics IV (jointly with DF, DS, KR, MA)

14:00 HSZ 301 TT 26 TR: Fluctuations and Noise

14:00 HSZ 304 TT 27 SC: Fe-based Superconductors – LiFeAs

14:00 HSZ 105 TT 28 CE: (General) Theory 2

Tuesday, March 15, 2011

18:00 P1 TT 29 Poster Session: Quantum Information Systems, Quantum Coherence (jointly with SAMOP) **TT**

SKM-DP

10:30 TRE Ma SKM-DP 1.1 **Invited Talks**
Chemotaxis of Sperm Cells: A generic principle for robust chemo-
navigation along helical paths
•Benjamin M. Friedrich

11:00 TRE Ma SKM-DP 1.2 Photonic structures inspired by nature
•Mathias Kolle, Heather Whitney, Maik Scherer, Pedro Cunha, Moritz
Kreysing, Jeremy Baumberg, Ullrich Steiner

11:30 TRE Ma SKM-DP 1.3 Playing with Nano-LEGO: Self-Assembly of Patchy Particles
•Daniela Kraft

12:00 TRE Ma SKM-DP 1.4 Controlling Excitons: Concepts for Phosphorescent Organic LEDs at High
Brightness
•Sebastian Reineke

10:30 TRE Ma SKM-DP 1 **Session**
SKM Dissertation Prize

13:00 HSZ E05 **Job Market**
Forschungszentrum Jülich:
„Forschungszentrum Jülich – Physics and more...“

14:30 HSZ E05 Basycon Unternehmensberatung GmbH:
„Hypothesen, Modelle, Experimente – was Forschung und
Unternehmensberatung gemeinsam haben“

09:00 HSZ Foyer, Tent A, B, C Exhibition of scientific instruments and literature

Wednesday, March 16, 2011

			Plenary Talk, Plenary Talk (SAMOP), Plenary Talk (SKM), Prize Talks
08:30	HSZ 01	PV XII	Structural dynamics of condensed matter mapped by femtosecond infrared and x-ray probes •Thomas Elsaesser
09:15	HSZ 02	PV XIII	Dynamics of Ground and Excited Electronic States from First Principles •Todd J. Martinez
09:15	HSZ 01	PV XIV	Emergent Electromagnetism in Solids •Naoto Nagaosa
13:30	HSZ 01	PV XV	What is the structure of the thiol/gold interface in self-assembled monolayers? •David Woodruff (Laureate of the Max-Born-Medal and Prize 2011)
14:00	HSZ 01	PV XVI	How crystals melt and glasses form in two dimensions •Georg Maret (Laureate of the Gentner-Kastler-Prize 2011)

SYMN

			Invited Talks
10:30	HSZ 01	SYMN 1.1	Exciton localization and dynamics in molecular aggregates •Jasper Knoester
11:00	HSZ 01	SYMN 1.2	Spectroscopy and transport in carbon nanotubes and graphene nanoribbons for electronics and biological applications •Oleg Prezhdo
11:30	HSZ 01	SYMN 1.3	Multidimensional Optical Spectroscopy of Biological Complexes •Shaul Mukamel
12:00	HSZ 01	SYMN 1.4	Theory of light-harvesting in photosynthetic pigment-protein complexes •Thomas Renger, Marcel Schmidt am Busch, M. El-Amine Madjet, Frank Müh
12:30	HSZ 01	SYMN 1.5	How do algae use quantum mechanics to harvest light for photosynthesis? •Gregory Scholes
			Session
10:30	HSZ 01	SYMN 1	Transport and Spectroscopy in Molecular Nanostructures

SYRP

			Invited Talks
14:30	HSZ 01	SYRP 1.1	What is realism in physics? What is the price for maintaining it? •Anthony J. Leggett
15:00	HSZ 01	SYRP 1.2	Testing concepts of reality with entangled photons in the laboratory and outside •Anton Zeilinger
15:30	HSZ 01	SYRP 1.3	Special relativity and quantum entanglement: How compatible are they? •Tim Maudlin
16:30	HSZ 01	SYRP 2.1	What can we learn from Bell's inequalities violations: the answers of Einstein and Feynman •Alain Aspect
17:00	HSZ 01	SYRP 2.2	Physics and Narrative •David Albert
17:30	HSZ 01	SYRP 2.3	The relativity of inertia and reality of nothing •Alexander Afriat

Wednesday, March 16, 2011

SYRP

18:00	HSZ 01	SYRP 2.4	Obtaining Information about and Controlling Quantum Particles: Quantum Engineering •Dieter Meschede
14:30	HSZ 01	SYRP 1	The Concept of Reality in Physics I
16:30	HSZ 01	SYRP 2	The Concept of Reality in Physics II

ISS

14:00	ZEU 160	ISS 5	Sessions Transport and Spectroscopy in Molecular Nanostructures I (CPP, MO, related to SYMN)
16:30	HSZ 02	ISS 6	Transport and Localization of interacting Bosons 1 (DY, Q)

GP

09:15	HSZ 204	GP 10.1	Invited Talk The Cold War and Soviet Physics •Alexei Kojevnikov
09:15	HSZ 204	GP 10	Sessions Sowjetunion
11:30	HSZ 204	GP 11	Personen
14:00	HSZ 204	GP 12	Methoden
16:15	HSZ 101	GP 13	Informationen zur Physikgeschichte (gemeinsam mit Arbeitsgruppe Information AGI)

UP

09:45	HSZ 201	UP 2.1	Invited Talks Atmosphärischer Ferntransport und seine Auswirkungen auf die Ozonkonzentrationen über Mitteleuropa •Thomas Trickl, Hans-Eckhart Scheel, Michael Sprenger, Andreas Stohl, Hannes Vogelmann
17:00	HSZ 201	UP 5.1	Grundwasserdatierung mit Umweltracern: Aktuelle Entwicklungen und Anwendungen •Werner Aeschbach-Hertig
09:45	HSZ 201	UP 2	Sessions Trace Gases
11:30	P2	UP 3	Poster Session
14:00	HSZ 201	UP 4	Climate; jointly with Arbeitsgruppe Junge DPG (AGjDPG)
17:00	HSZ 201	UP 5	Hydrosphere
18:15	HSZ 201	UP 6	Dynamics

AIW

09:30	MENSA Dül	AIW 1	Sessions AIW-Industrietag 1
14:00	MENSA Dül	AIW 2	AIW-Industrietag 2
15:45	MENSA Dül	AIW 3	AIW-Industrietag 3
17:00	MENSA Dül	AIW 4	Panel Discussion
18:00	MENSA Dül	AIW 5	Come Together with “Bier und Brezn”

Wednesday, March 16, 2011

AKE

Invited Talks

09:30	BEY 118	AKE 7.1	Routen und Wirkungsgrade der CO ₂ Abscheidung in Kraftwerken •Detlef Stolten
10:00	BEY 118	AKE 7.2	CO ₂ -Speicherkapazitäten in Deutschland: Eine aktuelle Betrachtung •Johannes Peter Gerling, Stefan Knopf, Klaus Reinhold, Christian Müller, Franz May
11:15	BEY 118	AKE 8.1	The Physics of Wind Park Optimization •Stefan Emeis
12:00	BEY 118	AKE 8.3	Offshore- Windparks; Ausgewählte Anforderungen aus dem Genehmigungsverfahren und der Praxis der Errichtung •Christian Dahlke
14:00	BEY 118	AKE 9.1	Geothermie für Grundlaststrom und Wärmeversorgung – internationale Nutzung, Potential und technologische Entwicklungen •David Bruhn, Ernst Huenges
14:30	BEY 118	AKE 10.1	Einsatz großer Wärmepumpen im Wohnungs- und Gewerbebau •Rüdiger Grimm
15:15	BEY 118	AKE 10.3	Anforderungen an einen Wärmepumpentarif zur Überwindung diskriminierender Steuern und Abgaben beim thermodynamisch optimierten Heizen •Gerhard Luther
16:30	BEY 118	AKE 11.1	Status and Potential of Organic Solar Cells •Moritz Riede
17:30	BEY 118	AKE 12.1	Clean Power from Deserts – The DESERTEC Academic Initiative •Michael Düren
18:15	BEY 118	AKE 12.3	Hochkonzentrierende Photovoltaik: Entwicklungsstand und Perspektiven •Andreas Walter Bett
18:45	BEY 118	AKE 12.4	Aufwindkraftwerke: Funktionsweise, Prototyp, Zukunftsperspektiven •Gerhard Weinrebe

Sessions

09:30	BEY 118	AKE 7	CO ₂ und Energiespeicherung
11:15	BEY 118	AKE 8	Offshore Wind
14:00	BEY 118	AKE 9	Geothermie
14:30	BEY 118	AKE 10	Wärmepumpen und Kraft-Wärme-Kopplung
16:30	BEY 118	AKE 11	Photovoltaik
17:30	BEY 118	AKE 12	Solarenergie im Sonnengürtel

AGA

Invited Talks

14:00	BEY 81	AGA 1.1	Securing Russian fissile materials •Pavel Podvig
15:00	BEY 81	AGA 1.2	Ein Vertrag zu Kernwaffenmaterialien – nur Cutoff oder mehr? •Annette Schaper

Sessions

14:00	BEY 81	AGA 1	Fissile Materials and Arms Control
18:00	BEY 81	AGA 2	Climate, Energy, and Security

Wednesday, March 16, 2011

AGI

Topical Talks

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|-------|---------|---------|--|
| 10:15 | HSZ 101 | AGI 1.1 | Streaming im Kontext von E-Learning
•Olaf Götz |
| 10:45 | HSZ 101 | AGI 1.2 | Ferngesteuerte und virtuelle Experimente im universitären Physikunterricht
•David Boehringer, Michael Jetter, Thomas Plocke |
| 14:00 | HSZ 101 | AGI 3.1 | OA-Netzwerk
•Judith Plümer |
- ### Sessions
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|-------|---------|-------|--|
| 10:15 | HSZ 101 | AGI 1 | Lehren und Lernen im virtuellen Raum (mit AGjDPG) |
| 11:30 | HSZ 101 | AGI 2 | Forschen im virtuellen Raum |
| 14:00 | HSZ 101 | AGI 3 | Zugang zum Wissen |
| 16:15 | HSZ 101 | AGI 4 | Informationen zur Physikgeschichte (mit Fachverband GP) |
| 17:00 | HSZ 101 | | Annual General Meeting of the working group on Information |
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AGjDPG

Invited Talks

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|-------|---------|------------|--|
| 14:00 | HSZ 201 | AGjDPG 5.1 | The role of clouds in climate forcing and feedbacks
•Johannes Quaas |
| 14:30 | HSZ 201 | AGjDPG 5.2 | Measuring cloud droplets: one step towards a better understanding of clouds
•Johanna Katharina Spiegel, Thomas Peter, Nina Buchmann, Werner Eugster |
| 16:00 | HSZ 201 | AGjDPG 5.6 | Subglacial lakes in Antarctica: Origin, Fate and Relevance
•Malte Thoma, Sebastian Göller, Klaus Grosfeld, Christoph Mayer |

Sessions

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|-------|---------|----------|--|
| 10:15 | HSZ 101 | AGjDPG 4 | Lehren und Lernen im virtuellen Raum (mit AGI) |
| 14:00 | HSZ 201 | AGjDPG 5 | Current Issues in Climate Research (with UP) |
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AGPhil

Invited Talks

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|-------|---------|------------|---|
| 10:00 | BEY 154 | AGPhil 5.1 | Distinguishable Quantum Particles and the Gibbs Paradox
•Dennis Dieks |
| 11:00 | BEY 154 | AGPhil 6.1 | Static vs. Dynamic Views of Temporal Existence in Relativistic Spacetimes
•Cord Friebe |
| 11:45 | BEY 154 | AGPhil 6.2 | How the emergence of spacetime might save the structuralist
•Christian Wüthrich |

Sessions

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|-------|---------|----------|--------------------|
| 10:00 | BEY 154 | AGPhil 5 | Quantum Particles |
| 11:00 | BEY 154 | AGPhil 6 | Spacetime Theories |
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A

Invited Talks

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|-------|---------|--------|---|
| 10:30 | BAR 106 | A 15.1 | Ultracold chemistry and dipolar collisions in a quantum gas of polar molecules
•Silke Ospelkaus, Amodsen Chotia, Marcio de Miranda, Brian Neyenhuis, Kang-Kuen Ni, Dajun Wang, Jun Ye, Deborah Jin |
|-------|---------|--------|---|

Wednesday, March 16, 2011

10:30	BAR 205	A 28.1	Quantum Interference Control of Free and Bound Electrons in Atoms and Molecules •Thomas Pfeifer
10:30	BAR 106	A 15	Ultra-cold atoms, ions and BEC III (with Q)
14:00	BAR 106	A 16	Atomic systems in external fields I
16:30	BAR 205	A 17	Ultra-cold atoms, ions and BEC IV (with Q)
16:30	BAR 106	A 18	Interaction with strong or short laser pulses I
10:30	BAR 205	A 28	Attosecond physics II
13:30	BAR 106		Annual General Meeting of the Atomic Physics division

MO

14:30	MER 02	MO 15.1	Invited Talk Raman spectroscopy: An indispensable tool for bio- and material photonics •Jürgen Popp, Michael Schmitt, Benjamin Dietzek, Robert Möller, Christoph Krafft, Petra Rösch
10:30	TOE 317	MO 12	Femtosecond Spectroscopy III
13:30	MER 02	MO 13	Annual General Meeting of the Molecular Physics Division
14:00	ZEU 160	MO 14	Transport and Spectroscopy in Molecular Nanostructures (related to SYMN, jointly with CPP)
14:30	MER 02	MO 15	Linear and nonlinear Raman Spectroscopy
14:30	BAR Schön	MO 16	Cold Molecules II
16:30	TOE 317	MO 17	Quantum Control
16:30	MER 02	MO 18	Experimental Techniques and Various Topics
16:30	BAR Schön	MO 19	Cold Molecules III

MS

10:30	GÖR 229	MS 5.1	Invited Talks Searching for physics beyond the standard model using beta decay •Marcus Beck
14:00	GÖR 229	MS 6.1	Hot water in space •Henrik Buhr
16:00	GÖR 229	MS 7.1	Laser source of radioactive ion beams at the on-line isotope separation facility ISOLDE at CERN •Valentin Fedosseev
10:30	GÖR 229	MS 5	Sessions Precision Mass Spectrometry and Fundamental Applications
12:15	GÖR 229		Annual General Meeting of the Mass Spectrometry division
14:00	GÖR 229	MS 6	Ion Storage Rings
16:00	GÖR 229	MS 7	Resonance Ionization MS, REMPI, MALDI

Q

10:30	HSZ 02	Q 24	Sessions Quantum Gases: Opt. Lattice 1
10:30	BAR Schön	Q 25	Matter Wave Optics
10:30	HÜL 386	Q 26	Quantum Information: Atoms and Ions 2

Wednesday, March 16, 2011

Q

10:30	BAR 106	Q 27	Ultra-cold atoms, ions and BEC III
10:30	SCH A01	Q 28	Quantum Information: Quantum Communication 1
10:30	SCH 251	Q 29	Laserentwicklung: Nichtlineare Effekte 1
10:30	SCH A118	Q 30	Photonics 2
13:30	SCH 251		Annual General Meeting of the Quantum Optics and Photonics division
14:30	HSZ 02	Q 31	Quantum Gases: Opt. Lattice 2
14:30	HÜL 386	Q 32	Quantum Information: Atoms and Ions 3
14:30	SCH A118	Q 33	Quantum Information: Quantum Communication 2
14:30	BAR Schön	Q 34	Cold Molecules II
14:30	SCH A01	Q 35	Ultrakurze Laserpulse: Anwendungen 2
14:30	SCH 251	Q 36	Laseranwendungen und Photonik 1
16:30	BAR Schön	Q 37	Cold Molecules III
16:30	BAR 205	Q 38	Ultra-cold atoms, ions and BEC IV
16:30	TOE 317	Q 39	Quantum Control
16:30	HSZ 02	Q 40	Transport and Localization of interacting Bosons 1
16:30	HÜL 386	Q 41	Precision Measurement and Metrology 1
16:30	SCH 251	Q 42	Laserentwicklung: Festkörperlaser 3
16:30	SCH A118	Q 43	Laseranwendungen und Photonik 2

BP**Invited Talks**

10:15	ZEU 250	BP 20.1	Quantitative universality and non-local interactions in neural pattern formation •Matthias Kaschube
10:15	ZEU 260	BP 21.1	Stretching Proteins out of equilibrium: how extracellular matrix proteins serve as mechanotransducers •Viola Vogel
15:00	ZEU 250	BP 22.1	The interplay between actin dynamics and membrane tension determines the shape of moving cells •Kinneret Keren

Sessions

10:15	ZEU 250	BP 20	Neurobiophysics
10:15	ZEU 260	BP 21	Biopolymers and Biomaterials II (with CPP)
15:00	ZEU 250	BP 22	Physics of Cells I
15:00	ZEU 260	BP 23	Biopolymers and Biomaterials III (with CPP)
18:00	ZEU 260		Annual General Meeting of the Biological Physics division

CPP**Invited Talks, Topical Talks**

10:30	ZEU 222	CPP 25.1	From elementary building blocks towards colloidal molecules Claudia Simone Wagner, •Alexander Wittemann
14:00	ZEU 222	CPP 31.1	Control of Charge Carrier Dynamics in Disordered Conjugated Polymers •Dirk Hertel
14:00	MOL 213	CPP 33.1	Multiscale Simulation of Soft Matter: Challenges •Florian Müller-Plathe
14:30	MOL 213	CPP 33.2	A self-consistent field approach for crosslinked polymer materials •Friederike Schmid

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CPP

15:00	MOL 213	CPP 33.3	Mechanical separation of short double stranded DNA: Effect of pulling geometry •Sanjay Kumar
15:45	MOL 213	CPP 33.4	Soft coarse-grained models for multi-component polymer melts •Marcus Müller
16:15	MOL 213	CPP 33.5	Simulations of Polymer Electrolytes for Lithium-Ion Batteries Highly Accurate Polarizable Potentials •Grant Smith
Sessions			
10:30	ZEU 222	CPP 25	Colloids and Complex Liquids I – Structure
10:30	ZEU 160	CPP 26	Polymer Dynamics
12:00	ZEU 160	CPP 27	Polymer Self Assembly
10:15	ZEU 260	CPP 28	Biopolymers and Biomaterials II (jointly with BP)
15:00	ZEU 260	CPP 29	Biopolymers and Biomaterials III (jointly with BP)
10:15	KÖN Farb	CPP 30	Glasses and Glass Transition I (jointly with DY, DF)
14:00	ZEU 222	CPP 31	Organic Semiconductors IV: Excitations and Charges (jointly with HL, DS)
14:00	ZEU 160	CPP 32	Transport and Spectroscopy in Molecular Nanostructures I (related to SYMN, jointly with MO)
14:00	MOL 213	CPP 33	Focused Session: Computational Polymer Physics – New Developments (jointly with DY)
17:00	P2	CPP 34	Poster: Elastomers and Gels
17:00	P2	CPP 35	Poster: Micro- and Nanofluidics
17:00	P2	CPP 36	Poster: Nanoparticles and Composite Materials
17:00	P2	CPP 37	Poster: Heterogeneous Nucleation and Microstructure Formation (related to SYMF)
17:00	P2	CPP 38	Poster: Colloids and Complex Liquids
19:15	ZEU 160		Annual General Meeting of the Chemical and Polymer Physics division

DF

Invited Talk			
10:15	MÜL Elch	DF 10.1	Ferroelectric domains: Investigation, fabrication, and applications •Elisabeth Soergel
Sessions			
10:15	MÜL Elch	DF 10	Nano- and microstructured dielectrics
10:15	KÖN Farb	DF 11	Glasses I (Joint Session of DY, DF, CPP)
15:00	P1	DF 12	Poster
17:45	MÜL Elch		Annual General Meeting of the Dielectric Solids division

DS

Invited Talks, Topical Talks			
10:15	GER 37	DS 27.1	Stochastic approach to electronic and spin thermal transport •Roberto D'Agosta
11:00	GER 37	DS 28.1	Selective spin-blockade in interacting molecular interferometers •Milena Grifoni, Andrea Donarini, Georg Begemann
11:30	GER 37	DS 28.2	Charge and Spin Transport through Single-Atom and Single-Molecule Junctions •Jörg Kröger

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DS

12:00	GER 37	DS 28.3	The strange life of a molecular spin observed under a microscope •Germar Hoffmann
15:00	GER 37	DS 30.1	Electrical spin injection in a hybrid organic/inorganic spin-polarized light emitting diode (spin-LED) •Ezekiel Johnston-Halperin
15:45	GER 37	DS 31.1	Organic spintronics and the great potential of ferromagnetic metal-organic interfaces •Martin Aeschlimann
Sessions			
10:15	GER 37	DS 27	Invited – D'Agosta
11:00	GER 37	DS 28	Spins in Organic Materials I (Focused Session, jointly with MA – Organisers: Salvan, Hess, Timm)
14:00	TRE Phy	DS 29	Gaede Prize Talk -- Philip Hofmann
15:00	GER 37	DS 30	Invited – Johnston-Halperin
15:45	GER 37	DS 31	Spins in Organic Materials II (Focused Session, jointly with MA – Organisers: Salvan, Hess, Timm)
17:00	GER 37	DS 32	Spins in Organic Materials III (Focused Session, jointly with MA – Organisers: Salvan, Hess, Timm)
11:00	GER 38	DS 33	Progress in Micro- and Nanopatterning: Techniques and Applications II (Focused Session, jointly with O – Organisers: Graaf, Hartmann)
15:00	GER 38	DS 34	Progress in Micro- and Nanopatterning: Techniques and Applications III (Focused Session, jointly with O – Organisers: Graaf, Hartmann)
17:15	GER 38	DS 35	Plasmonics and Nanophotonics (jointly with HL and O)
10:15	POT 251	DS 36	Plasmonics and Nanophotonics HL-I (jointly with HL and O)
11:15	WIL A317	DS 37	Plasmonics and Nanophotonics O-IV (jointly with HL and O)
15:00	WIL A317	DS 38	Plasmonics and Nanophotonics O-V (jointly with HL and O)
14:00	ZEU 222	DS 39	Organic Electronics and Photovoltaics CPP-IV (jointly with CPP, HL, and O)
10:15	FOE Anorg	DS 40	Organic Electronics and Photovoltaics HL-II (jointly with CPP, HL, and O)
18:00	FOE Anorg	DS 41	Organic Electronics and Photovoltaics HL-III (jointly with CPP, HL, and O)
15:00	P1	DS 42	Poster I: Progress in Micro- and Nanopatterning: Techniques and Applications (jointly with O); Spins in Organic Materials; Ion Interactions with Nano Scale Materials; Organic Electronics and Photovoltaics; Plasmonics and Nanophotonics (jointly with HL and O); High-k and Low-k Dielectrics (jointly with DF); Organic Thin Films; Nanoengineered Thin Films; Layer Deposition Processes; Layer Properties: Electrical, Optical, and Mechanical Properties; Thin Film Characterisation: Structure Analysis and Composition; Application of Thin Films
15:00	P2	DS 43	Poster II: Thin Film Chalcogenide Photovoltaics; Thermoelectric Materials, Thin Films, and Nanostructures

DY

Topical Talks			
10:15	ZEU 255	DY 17.1	Nonlinear Dynamics of Complex Hysteretic Systems •Günter Radons
14:00	ZEU 255	DY 23.1	Nonlinear waves in localizing media •Sergej Flach
Sessions			
10:30	HÜL 186	DY 16	Statistical Physics II
10:15	ZEU 255	DY 17	Nonlinear Dynamics I
10:15	GÖR 226	DY 18	Networks: From Topology to Dynamics I (with BP, SOE)

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DY

10:45	GÖR 226	DY 19	Networks: From Topology to Dynamics II (with BP, SOE)
10:15	KÖN Farb	DY 20	Glasses I (jointly with DF and CPP)
11:45	HÜL 186	DY 21	Thermodynamics and Statistical Physics of Small Systems (contributed talks)
14:00	HÜL 186	DY 22	Granular Matter/ Contact Dynamics
14:00	ZEU 255	DY 23	Nonlinear Waves/ Nonlinear Lattices
14:00	MOL 213	DY 24	Focus Session: Computational Polymer Physics – New Developments (jointly with CPP)
15:30	GÖR 226	DY 25	Networks: From Topology to Dynamics III (with BP, SOE)
16:30	ZEU 255	DY 26	Nonlinear Dynamics II
16:30	HSZ 02	DY 27	ISS Transport and Localization of Interacting Bosons I

HL

Invited Talks

14:30	POT 51	HL 56.1	Cross-sectional Scanning Tunneling Microscopy on Semiconductor Nanostructures •Holger Eisele
14:30	POT 251	HL 58.1	Transport spectroscopy on non-equilibrium spin and charge states in self-organized quantum dots •Martin Geller

Sessions

10:15	FOE Anorg	HL 46	Organic Photovoltaics I
10:15	POT 51	HL 47	GaN on Si
10:15	POT 151	HL 48	ZnO: Devices
10:15	POT 251	HL 49	Photonic Crystals and Metamaterials
10:30	TRE Ma	HL 50	SKM Symposium: Topological Insulators (SYTI)
11:15	TRE Phy	HL 51	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers III
11:45	POT 51	HL 52	Nonpolar and Semipolar Nitrides
12:30	POT 251	HL 53	Optical Properties I
14:00	ZEU 222	HL 54	Joint Session: Organic Semiconductors IV: Excitations and Charges
14:30	FOE Anorg	HL 55	Photovoltaics: mainly Technology and Photon Management
14:30	POT 51	HL 56	Invited Talk: Holger Eisele
14:30	POT 151	HL 57	ZnO: Optical Properties
14:30	POT 251	HL 58	Invited Talk: Martin Geller
14:30	TRE Ma	HL 59	SKM Symposium: Semiconductor Nanophotonics – Quantum Optics and Devices (SYNP)
15:00	POT 251	HL 60	Quantum Dots: Transport
15:00	TRE Phy	HL 61	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers IV
15:15	POT 51	HL 62	Nitrides: Advanced Characterization Techniques
15:45	POT 151	HL 63	II-VI-Compounds
16:30	POT 251	HL 64	Quantum Wires: Transport
17:00	POT 51	HL 65	Nitrides: AlGaN
17:15	GER 38	HL 66	Joint Session: Plasmonics and Nanophotonics
18:00	FOE Anorg	HL 67	OLEDs and OFETs

Wednesday, March 16, 2011

KR

15:00 P1 KR 6 **Session**
Poster: Crystallography in Materials Science

MA

Invited Talks

10:15 HSZ 04 MA 26.1 Magnetic light-matter interaction at highest frequencies
•Tobias Kampfrath, Alexander Sell, Matteo Burrelli, Dries van Oosten, Manfred Fiebig, Susumu Noda, Martin Wolf, Alfred Leitenstorfer, Kobus Kuipers, Rupert Huber

14:00 HSZ 04 MA 35.1 Skyrmion crystals and topological transport phenomena
•Yoshinori Tokura

14:30 HSZ 04 MA 35.2 Discovery of an atomic-scale skyrmion lattice in an ultrathin magnet: Fe/Ir(111)
•S. Heinze, K. von Bergmann, M. Menzel, J. Brede, A. Kubetzka, R. Wiesendanger, G. Bihlmayer, S. Blügel

15:00 HSZ 04 MA 35.3 Skyrmion states in noncentrosymmetric magnets
•Alexei N. Bogdanov, Andrei A. Leonov, Ulrich K. Röbner

15:30 HSZ 04 MA 35.4 Complex Magnetic Phase Diagram of the cubic Helimagnet FeGe
•Heribert Wilhelm

16:00 HSZ 04 MA 35.5 Magnetoelectric effects in non-collinear magnets
•Maxim Mostovoy

Sessions

10:15 HSZ 04 MA 26 High Frequency Magnetic Light-Matter Interaction – Invited Talk

10:30 TRE Ma MA 27 SKM-SYTI: Topological Insulators (jointly with TT, HL)

10:15 GER 37 MA 28 Spins in Organic Materials (jointly with DS) – Invited Talk

11:00 HSZ 103 MA 29 Micro- and Nanostructured Magnetic Materials II

11:00 HSZ 401 MA 30 Magnetic Semiconductors I

11:00 HSZ 403 MA 31 Magnetization Dynamics III

11:00 HSZ 04 MA 32 Magnetic Thin Films I

11:00 GER 37 MA 33 Focus Session "Spins in Organic Materials I" (jointly with DS)

11:15 CHE 184 MA 34 Surface magnetism I (jointly with O)

14:00 HSZ 04 MA 35 Spin Structures/ Skyrmions (jointly with TT) – Invited Talks

14:45 HSZ 103 MA 36 Micro- and Nanostructured Magnetic Materials III

14:45 HSZ 401 MA 37 Magnetic Semiconductors II

14:45 HSZ 403 MA 38 Magnetization Dynamics IV

15:00 GER 37 MA 39 Spins in Organic Materials (jointly with DS) – Invited Talk

15:00 CHE 184 MA 40 Surface magnetism II (jointly with O)

15:45 GER 37 MA 41 Focus Session "Spins in Organic Materials II" (jointly with DS)

16:45 HSZ 04 MA 42 Topological Insulators (jointly with TT, HL)

17:00 HSZ 103 MA 43 Micro- and Nanostructured Magnetic Materials IV

17:00 HSZ 401 MA 44 Magnetic Half-metals and Oxides I

17:30 HSZ 403 MA 45 Micromagnetism/ Computational Magnetics

17:00 CHE 184 MA 46 Magnetic Thin Films II

19:00 HSZ 04 Annual General Meeting of the Magnetism division

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MM

Invited Talks, Topical Talks

10:15	IFW A	MM 20.1	Atomic-scale modeling of dislocations in iron •Matous Mrovec
11:00	IFW A	MM 21.1	Materials design based on ab initio thermodynamics: Development of accurate and efficient multiscale strategies •Jörg Neugebauer, Blazej Grabowski, Fritz Körmann, Martin Friak, Tilmann Hickel
11:30	IFW A	MM 21.2	Diffuse scattering methods as a testbed for alloy theory •Harald Reichert
12:00	IFW A	MM 21.3	From electronic structure to real materials properties: Concepts and realization •Stefan Müller
11:00	IFW B	MM 22.1	In-situ TEM: Atomistic Insights into Crystallisation •Christina Scheu
11:30	IFW B	MM 22.2	Quantitative Nanoscale Analysis in 3D using Electron Tomography •Christian Kübel
14:00	IFW A	MM 24.1	Statistical thermodynamics of defects and interfaces in metals •Michael W. Finnis
14:30	IFW A	MM 25.1	The LDA+DMFT approach to the electron theory of strongly correlated metals •Frank Lechermann
14:30	IFW B	MM 26.1	Electron Holography for structures and fields at a nanoscale •Hannes Lichte, Dorin Geiger, Andreas Lenk, Martin Linck, Axel Lubk, Falk Roeder, John Sandino, Jan Sickmann, Karin Vogel, Daniel Wolf
16:15	IFW A	MM 28.3	Hydrogen in metals, atomic defects in crystals, and wetting phenomena. – The benefit of using density functional theory •Lothar Schimmele

Sessions

10:15	IFW A	MM 20	HV Mrovec
11:00	IFW A	MM 21	Topical Session Electron Theory I
11:00	IFW B	MM 22	Topical Session TEM VI
11:00	IFW D	MM 23	Phase Transformations I
14:00	IFW A	MM 24	HV Finnis
14:30	IFW A	MM 25	Topical Session Electron Theory II
14:30	IFW B	MM 26	Topical Session TEM VII
14:30	IFW D	MM 27	Phase Transformations II
15:45	IFW A	MM 28	Topical Session Electron Theory III
15:45	IFW B	MM 29	Topical Session TEM VIII
16:15	IFW D	MM 30	Complex Materials
17:15	P5	MM 31	Postersitzung II
19:00	IFW B		Annual General Meeting of the Metal and Material Physics division

O

Prize Talk, Invited Talk, Topical Talk

10:15	TRE Phy	O 37.1	Writing nanostructures with a focused electron beam •Hubertus Marbach
14:00	TRE Phy	O 47.1	Spin-split metallic surface states on semimetals and topological insulators •Philip Hofmann

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O

15:00	TRE Phy	O 48.1	Progress in diffusion quantum Monte Carlo calculations •Richard Needs
10:15	TRE Phy	O 37	Sessions Invited Talk (Hubertus Marbach)
11:00	GER 38	O 38	[DS] Progress in Micro- and Nanopatterning: Techniques and Applications II (Focused Session, jointly with O – Organisers: Graaf, Hartmann)
11:15	TRE Phy	O 39	Focussed session: Theory and computation of electronic structure: new frontiers III (jointly with HL, DS)
11:15	PHY C213	O 40	Metal substrates: Adsorption of organic / bio molecules V
11:15	WIL A317	O 41	Plasmonics and Nanooptics IV
11:15	WIL B321	O 42	Graphene II
11:15	WIL B122	O 43	Surface Dynamics II
11:15	WIL C107	O 44	Nanostructures at surfaces: Dots, particles, clusters, arrays III
11:15	WIL C307	O 45	Oxides and insulators: Adsorption II
11:15	CHE 184	O 46	Surface magnetism I (jointly with MA)
14:00	TRE Phy	O 47	Gaede Prize talk (Philip Hofmann)
15:00	TRE Phy	O 48	Focussed session: Theory and computation of electronic structure: new frontiers IV (jointly with HL, DS)
15:00	PHY C213	O 49	Metal substrates: Adsorption of organic / bio molecules VI
15:00	WIL A317	O 50	Plasmonics and Nanooptics V
15:00	WIL B321	O 51	Graphene III
15:00	WIL B122	O 52	Nanostructures at surfaces: Wires, tubes
15:00	WIL C107	O 53	Solid / liquid interfaces III
15:00	WIL C307	O 54	Particles and clusters I
15:00	CHE 184	O 55	Surface magnetism II (jointly with MA)
15:00	GER 38	O 56	[DS] Progress in Micro- and Nanopatterning: Techniques and Applications III (Focused Session, jointly with O – Organisers: Graaf, Hartmann)
16:30	WIL C307	O 57	Nanotribology
17:15	GER 38	O 58	[DS] Plasmonics and Nanophotonics (jointly with HL and O)
17:30	P3	O 59	Poster Session III (Nanotribology; Polymeric biomolecular films; Organic electronics and photovoltaics, Covalent networks on surfaces; Phase transitions; Particles and clusters; Transparent conductive oxides)
17:30	P4	O 60	Poster Session IV (Solid/liquid interfaces; Semiconductors; Oxides and insulators; Graphene; Plasmonics and nanooptics; Electronic Structure; Surface chemical reactions; Heterogeneous catalysis)

SOE

10:15	GÖR 226	SOE 13.1	Invited Talk Impact of Single Links in Growing Networks •Jan Nagler, Marc Timme
10:15	GÖR 226	SOE 13	Sessions Networks: From Topology to Dynamics I (with BP, DY)
10:45	GÖR 226	SOE 14	Networks: From Topology to Dynamics II (with BP, DY)
14:00	GÖR 226	SOE 15	Economic Models and Evolutionary Game Theory I (with BP, DY)
15:30	GÖR 226	SOE 16	Networks: From Topology to Dynamics III (with BP, DY)
17:15	GÖR 226	SOE 17	Socio-Economic Systems

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TT

Invited Talks

10:30	HSZ 301	TT 31.1	New insights into the spin Hall effect •Peter Schwab
15:45	HSZ 03	TT 34.7	Coupled evolution and coherence of two-electron spin qubits •Hendrik Bluhm
Sessions			
10:30	HSZ 03	TT 30	TR: Quantum Coherence and Quantum Information Systems 1 (jointly with MA and HL)
10:30	HSZ 301	TT 31	TR: Nanoelectronics II – Spintronics and Magnetotransport 1 (jointly with HL and MA)
10:30	HSZ 304	TT 32	SC: Fe-based Superconductors – Theory
10:30	HSZ 105	TT 33	CE: Metal-Insulator Transition 1
14:00	HSZ 03	TT 34	TR: Quantum Coherence and Quantum Information Systems 2 (jointly with MA and HL)
14:00	HSZ 301	TT 35	CE: Low-dimensional Systems – Materials 3
14:00	HSZ 304	TT 36	SC: Fe-based Superconductors – 122 – Properties, Electronic Structure, Mechanisms
14:00	HSZ 105	TT 37	MLT: Quantum Liquids, Bose-Einstein Condensates, Ultra-cold Atoms, ...
14:00	P3	TT 38	Poster Session Transport
14:00	HSZ 04	TT 39	Spin Structures/ Skyrmions (jointly with MA)
16:45	HSZ 04	TT 40	Topological Insulators (jointly with HL, MA)
18:15	HSZ 105	TT 41	CE: Spin Systems and Itinerant Magnets 1
18:45	HSZ 304	TT 42	SC: Fe-based Superconductors – Fe(Se,Te)
19:00	HSZ 03	TT 43	TR: Nanoelectronics II – Spintronics and Magnetotransport 2 (jointly with HL and MA)

VA

Session

14:00	TRE Phy	VA 5	Gaede Prize talk (Philip Hofmann)
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SKM-SYNP

Invited Talks

14:30	TRE Ma	SKM-SYNP 1.1	Quantum Optics on Photonic Chips •Dirk Englund, Brendan Shields, Hongkun Park, Mikhail Lukin, Kelley Rivoire, Jelena Vuckovic, Fariba Hatami
15:00	TRE Ma	SKM-SYNP 1.2	Two-photon Interference from Separate Quantum Dots Edward Flagg, Andreas Muller, Sergey Polyakov, Alexander Ling, Alan Migdall, •Glenn S. Solomon
15:30	TRE Ma	SKM-SYNP 1.3	Coherent optoelectronic control of a single exciton qubit •Artur Zrenner, Steffen Michaelis de Vasconcellos, Simon Gordon, Dirk Mantei, Wadim Quiring, Mohannad Al-Hmoud, Torsten Meier, Max Bichler, Andreas D. Wieck, Dirk Reuter
16:15	TRE Ma	SKM-SYNP 1.4	Generation of non-classical states of light with site- and potential-controlled pyramidal quantum dots •Eli Kapon
16:45	TRE Ma	SKM-SYNP 1.5	Semiconductor Devices for Quantum Photonics •Andrew Shields, Anthony Bennett, Mark Stevenson, Cameron Salter, Raj Patel, Ian Farrer, Christine Nicoll, David Ritchie

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SKM-SYNP

14:30 TRE Ma SKM-SYNP 1 **Session**
Semiconductor Nanophotonics: Quantum Optics and Devices

SKM-SYTI

10:30 TRE Ma SKM-SYTI 1.1 **Invited Talks**
Topological insulators and topological superconductors
•Shoucheng Zhang

11:00 TRE Ma SKM-SYTI 1.2 Dirac Fermions in HgTe Quantum Wells
•Laurens Molenkamp

11:30 TRE Ma SKM-SYTI 1.3 Interaction, disorder, and quantum criticality in Z_2 topological insulators
•Alexander Mirlin

12:00 TRE Ma SKM-SYTI 1.4 Disorder and Interactions in Topological Insulators
•Allan H. MacDonald

12:30 TRE Ma SKM-SYTI 1.5 Tunable multifunctional topological insulators in ternary Heusler and related compounds
•Claudia Felser, Stanislav Chadov, Lukas Muechler, Jürgen Kübler, Shou Cheng Zhang, Xiaoliang Qi, Hai-Jun Zhang

10:30 TRE Ma SKM-SYTI 1 **Session**
Topological Insulators

13:00 HSZ E05 **Job Market**
Procter & Gamble Service GmbH:
“Science behind everyday products. My experience as a physicist in the worlds leading consumer goods company Procter & Gamble”

14:30 HSZ E05 Heraeus Holding GmbH:
„Einstiegs- und Entwicklungsmöglichkeiten bei Heraeus“

16:00 HSZ E05 Siemens AG:
„Als Physiker/in in die Inhouse-Beratung?“

09:00 HSZ Foyer, Tent A, B, C Exhibition of scientific instruments and literature

20:00 HSZ 01 PV XVII **Public Evening Talk (Entrance free)**
Photovoltaik – Strom aus der Sonne
•Karl Leo

Thursday, March 17, 2011

Plenary Talk, Plenary Talk (SAMOP), Plenary Talk (SKM), Prize Talk

08:30	HSZ 01	PV XVIII	Pushing the Envelope in Biological Imaging •Eric Betzig
09:15	HSZ 02	PV XIX	Precision spectroscopy using quantum logic •Piet O. Schmidt
09:15	HSZ 01	PV XX	Towards a quantitative understanding of high-temperature superconductivity •Bernhard Keimer
13:30	HSZ 01	PV XXI	Scanning probe microscopy of molecules on insulating films: From orbital imaging to molecular structure determination •Gerhard Meyer (Laureate of the Robert-Wichard-Pohl-Prize 2011)

SYCH

Invited Talks

14:00	HSZ 02	SYCH 1.1	Radiocarbon dating of cultural objects: Limit •Hans-Arno Synal
14:30	HSZ 02	SYCH 1.2	From Lascaux to Rembrandt. Insights into invisible traces of paintings and drawings from physical methods •Ina Reiche
15:00	HSZ 02	SYCH 1.3	IPANEMA, A European research platform for the study of ancient and historical materials •Loïc Bertrand
15:30	HSZ 02	SYCH 1.4	3D X-ray view of treasures •Birgit Kanngießer, Ioanna Mantouvalou, Wolfgang Malzer
16:30	HSZ 02	SYCH 2.1	Looking below the surface of paintings by help of neutrons •Claudia Laurenze-Landsberg, Carl Otto Fischer
17:00	HSZ 02	SYCH 2.2	X-ray fluorescence analysis using synchrotron radiation excitation •Martin Radtke, Günter Buzanich, Uwe Reinholz, Heinrich Riesemeier
17:30	HSZ 02	SYCH 2.3	Metabolic tools to study wine body •Oliver Fiehn, Kirsten Skogerson, Gert Wohlgemuth
18:00	HSZ 02	SYCH 2.4	Identification of Ancient Plant Textiles •Bodil Holst, Bridget Murphy

Sessions

14:00	HSZ 02	SYCH 1	Cultural Heritage in the Light of Physical Methods I
16:30	HSZ 02	SYCH 2	Cultural Heritage in the Light of Physical Methods II

SYHQ

Invited Talks

10:30	HSZ 01	SYHQ 1.1	Circuit Quantum Electrodynamics with Electrons on Helium •David Schuster
11:00	HSZ 01	SYHQ 1.2	Strong coupling of a spin ensemble to a superconducting resonator •Patrice Bertet, Yuimaru Kubo, Florian Ong, Denis Vion, Vincent Jacques, Dingwei Zheng, Anaïs Dréau, Jean-François Roch, Alexia Auffeves, Fedor Jelezko, Jörg Wrachtrup, Philippe Bergonzo, Daniel Esteve
11:30	HSZ 01	SYHQ 1.3	Interfacing ultracold atoms and micromechanical oscillators •Philipp Treutlein, Maria Korppi, Andreas Jöckel, Stephan Camerer, David Hunger, Theodor W. Hänsch

Thursday, March 17, 2011

SYHQ

12:00	HSZ 01	SYHQ 1.4	Interfacing Optomechanics and Atoms •Klemens Hammerer, Markus Aspelmeyer, Jeff Kimble, Florian Marquardt, Eugene Polzik, Philipp Treutlein, Jun Ye, Peter Zoller
12:30	HSZ 01	SYHQ 1.5	Ultracold Atoms near Carbon Nanotubes •Andreas Günther
10:30	HSZ 01	SYHQ 1	Session Hybrid Quantum Systems -- Interfacing Atoms, Solids and Light

SYMB

14:30	HSZ 01	SYMB 1.1	Invited Talks Synthetic Quantum Many-Body Systems •Tilman Esslinger
15:00	HSZ 01	SYMB 1.2	Unconventional quantum phases in quantum magnetism and cold atoms •Frederic Mila
15:30	HSZ 01	SYMB 1.3	Exploring the physics of disorder with Bose-Einstein condensates •Giovanni Modugno
16:00	HSZ 01	SYMB 1.4	Influence of randomness on the Mott transition in the organic molecular conductors •Takahiko Sasaki
16:30	HSZ 01	SYMB 1.5	Unconventional superconductivity in strongly correlated materials •Jörg Schmalian
14:30	HSZ 01	SYMB 1	Session Many-Body Physics of Model Systems and Real Materials

ISS

10:30	TOE 317	ISS 7	Sessions Transport and Spectroscopy in Molecular Nanostructures II (CPP, MO, related to SYMN)
10:30	HSZ 02	ISS 8	Quantum Optics of Solid State Photon Sources (Q, HL)
14:30	BAR Schön	ISS 9	Transport and Localization of interacting Bosons 2 (DY, Q)

ST

10:00	POT 112	ST 5	Sessions Imaging with Ionizing Radiation I
14:00	POT 112	ST 6	Imaging with Ionizing Radiation II
16:00	POT 112	ST 7	Radiation Physics Measurements

UP

09:45	HSZ 204	UP 7.1	Invited Talks Paul traps: from a single levitated droplet to cloud microphysics •Alexei Kiselev, Christiane Wender, Daniel Rzesanke, Thomas Pander, Thomas Leisner
14:00	HSZ 204	UP 8.1	Development and application of a mobile LOPAP instrument •Theo Brauers, Rolf Häsel, Frank Holland, Andreas Wahner
15:30	HSZ 204	UP 9.1	Inter-satellite laser ranging system for GRACE follow-on •Benjamin Sheard, Christoph Mahrdt, Gunnar Stede, Oliver Gerberding, Nils Brause, Vitali Müller, Marina Dehne, Gerhard Heinzl, Karsten Danzmann

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UP

Sessions

09:45	HSZ 204	UP 7	Aerosols
14:00	HSZ 204	UP 8	Measurement Techniques
15:30	HSZ 204	UP 9	Remote Sensing
17:00	ZEU 255	UP 10	Data Analysis and Stochastic Modeling; jointly with Fachverband Dynamik und Statistische Physik (DY)

AKC

Invited Talks

14:00	HSZ 201	AKC 1.1	An der Schnittstelle zwischen Politik, Verwaltung und Wissenschaft •Friederike Weritz
14:30	HSZ 201	AKC 1.2	Arbeiten im Patentbereich: rechtsnah, aber nicht physikfern •Dorothee Weber-Bruls
15:15	HSZ 201	AKC 1.3	Physiker im Berufsleben: Wissenschaftsjournalismus •Dirk H. Lorenzen
15:45	HSZ 201	AKC 1.4	Arbeiten bei der Deutschen Bahn: Physiker leitet das Projekt „ICE-London“ •Steffen Geers

Session

14:00	HSZ 201	AKC 1	Und nach dem Physikstudium? – Interessante Berufseinblicke (mit jDPG)
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AGA

Invited Talks

10:00	MENSA Dül	AGA 3.1	Strategic stability, numbers and the breakout problem •James Acton
11:00	MENSA Dül	AGA 3.2	Das iranische Raketenprogramm •Robert Schmucker
14:00	MENSA Dül	AGA 4.1	Zivilgesellschaftliche Beiträge zur Überprüfung nuklearer Rüstungskontrollverträge •Martin B. Kalinowski
15:00	MENSA Dül	AGA 4.2	Responsibility in industry to prevent sensitive exports and its implementation Dieter Müller, •Ralf Wirtz

Sessions

10:00	MENSA Dül	AGA 3	Strategic Stability and Regional Consequences
14:00	MENSA Dül	AGA 4	Nuclear Verification, Factors and Actors
18:30	MENSA Dül		Annual General Meeting of the working group on Physics and Disarmament

AGjDPG

Invited Talks

10:30	HSZ 201	AGjDPG 6.1	The Hydrodynamics of Microswimmers •Gerhard Gompper
11:00	HSZ 201	AGjDPG 6.2	What sperm head wiggling can tell us about flagellar hydrodynamics •B.M. Friedrich, I.H. Riedel-Kruse, J. Howard, F. Julicher

Sessions

10:30	HSZ 201	AGjDPG 6	Biophysics II: Mechanics and Flow in Biological Systems (with BP)
14:00	HSZ 201	AGjDPG 7	Und nach dem Physikstudium? – Interessante Berufseinblicke (mit AKC)

Thursday, March 17, 2011

AGPhil

Sessions

10:00 BEY 154 AGPhil 7 Quantum Particles
11:15 BEY 154 AGPhil 8 Alternative Ansätze

A

Invited Talks

10:30 BAR 205 A 19.1 Cluster ionization in strong laser fields – NIR vs. XUV
•Thomas Fennel, Jörg Köhn, Christian Peltz, Mathias Arbeiter
14:00 BAR 106 A 22.1 Influence of two-center electronic correlations on atomic processes
•Carsten Müller, Alexander B. Voitkiv, Bennaceur Najjari, Jose R. Crespo Lopez-Urrutia, Zoltan Harman
16:30 BAR 106 A 25.1 Conical intersections in an ultracold gas
•Sebastian Wüster, Alexander Eisfeld, Jan-Michael Rost

Sessions

10:30 BAR 205 A 19 Atomic clusters I
10:30 BAR 106 A 20 Ultra-cold atoms, ions and BEC V (with Q)
14:00 BAR 205 A 21 Atomic systems in external fields II
14:00 BAR 106 A 22 Electron scattering and recombination I
14:30 SCH A118 A 23 Ultracold Atoms: Trapping and Cooling 1 (with Q)
16:30 BAR 205 A 24 Attosecond physics I
16:30 BAR 106 A 25 Ultra-cold plasmas and Rydberg systems I
16:00 P2 A 26 Poster III

MO

Invited Talk

14:30 MER 02 MO 23.1 Eigenstate resolving molecular spectroscopy in the gas-phase: towards larger systems and higher energies
•Michael Schmitt, Christian Brand, Olivia Oeltermann, Leo Meerts

Sessions

10:30 TOE 317 MO 20 Transport and Spectroscopy in Molecular Nanostructures II (related to SYMN, jointly with CPP)
10:30 MER 02 MO 21 Electronic Spectroscopy I
14:30 TOE 317 MO 22 Femtosecond Spectroscopy IV
14:30 MER 02 MO 23 Electronic Spectroscopy II
16:00 P2 MO 24 Poster: Femtosecond spectroscopy
16:00 P2 MO 25 Poster: Quantum control
16:00 P2 MO 26 Poster: Biomolecules
16:00 P1 MO 27 Poster: Theory: Quantum Chemistry
16:00 P1 MO 28 Poster: Theory: Molecular Dynamics
16:00 P1 MO 29 Poster: Electronic Spectroscopy
16:00 P1 MO 30 Poster: Photochemistry
16:00 P1 MO 31 Poster: Collisions, Energy Transfer
16:00 P1 MO 32 Poster: Experimental Techniques
16:00 P1 MO 33 Poster: Various Topics

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MS

10:30	GÖR 229	MS 8.1	Invited Talk First application of a multi-reflection time-of-flight mass separator to radioactive beams •Robert N. Wolf
10:30	GÖR 229	MS 8	Session New Mass Spectrometric Methods and Technical Developments

Q

			Sessions
10:30	HSZ 02	Q 44	Quantum Optics of Solid State Photon Sources
10:30	HÜL 386	Q 45	Precision Measurement and Metrology 2
10:30	BAR 106	Q 46	Ultra-cold atoms, ions and BEC V
10:30	BAR Schön	Q 47	Quantum Information: Quantum Computer
10:30	SCH 251	Q 48	Quantum Gases: Effects of Interactions
10:30	SCH A215	Q 49	Lasieranwendungen: Laserspektroskopie
10:30	SCH A01	Q 50	Quantum Effects: Entanglement and Decoherence
14:30	SCH A118	Q 51	Ultracold Atoms: Trapping and Cooling 1
14:30	HÜL 386	Q 52	Precision Measurement and Metrology 3
14:30	SCH 251	Q 53	Quantum Information: Photons and Nonclassical Light 1
14:30	SCH A01	Q 54	Quantum Effects: QED
14:30	BAR Schön	Q 55	Transport and Localization of interacting Bosons 2
14:30	SCH A215	Q 56	Ultrakurze Laserpulse: Anwendungen 3
16:30	P1	Q 57	Poster 3: Quantengase, Ultrakalte Atome, Ultrakalte Moleküle, Materiewellen Optik, Präzisionsmessungen, Metrologie

BP

			Invited Talks
10:15	ZEU 260	BP 25.1	Bacterial Games •Erwin Frey
14:00	ZEU 250	BP 27.1	Inelastic Mechanics of Biopolymer Networks •Klaus Kroy
			Sessions
10:15	ZEU 250	BP 24	Physics of Cells II
10:15	ZEU 260	BP 25	Statistical Physics in Biological Systems III (joint DY, BP)
10:30	HSZ 201	BP 26	Biophysics II: Mechanics and Flow in Biological Systems (joint AG jDPG, BP)
14:00	ZEU 250	BP 27	Physics of Cells III
14:00	ZEU 260	BP 28	Statistical Physics in Biological Systems IV (joint DY, BP)
17:15	P3	BP 29	Posters: Biopolymers & Biomaterials
17:15	P3	BP 30	Posters: Physics of Cells
17:15	P3	BP 31	Posters: Biological Machines & Motor Proteins
17:15	P3	BP 32	Posters: Other Topics in Biological Physics

CPP

			Topical Talks
12:30	ZEU 222	CPP 39.9	Combining structure and mechanical properties of colloidal systems Marcel Roth, Chris Grigoriadis, Jinyu Zhao, Burkhard Mayer, Doris Vollmer, George Floudas, •Günter. K. Auernhammer

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CPP

10:30	ZEU 160	CPP 40.1	Crystallization in block copolymer thin films •Christine M. Papadakis, Charles Darko, Günter Reiter
10:45	ZEU 114	CPP 41.1	Local Anisotropy of Fluids, Glasses and Jammed Bead Packs •Gerd Schroeder-Turk
12:30	ZEU 114	CPP 41.7	Concentration fluctuations and intrinsic confinement effects in binary glass forming liquids: Insights from neutron scattering and X-ray photon correlation spectroscopy •Thomas Blochowicz, Sebastian Schramm, Emmanuel Gouirand, Philipp Gutfreund, Bernd Stühn, Bernhard Frick, Yuriy Chushkin
14:00	ZEU 222	CPP 43.1	NanoModel – Multi-Scale Modelling of Nano-Structured Polymeric Materials •Horst Weiss
18:00	ZEU 222	CPP 43.15	Are nanomaterials safe? Physico-chemical characterization for regulation and for life-cycle assessment of nanocomposites •Wendel Wohlleben
Sessions			
10:30	ZEU 222	CPP 39	Colloids and Complex Liquids II – Dynamics and Mechanical Properties
10:30	ZEU 160	CPP 40	Polymer Crystallization and Semicrystalline Polymers
10:45	ZEU 114	CPP 41	Glasses and Glass Transition II (jointly with DY, DF)
10:30	TOE 317	CPP 42	Transport and Spectroscopy in Molecular Nanostructures II (related to SYMN, jointly with CPP)
14:00	ZEU 222	CPP 43	Nanoparticles and Composite Materials I
14:00	ZEU 160	CPP 44	Micro- and Nanofluidics I
17:15	ZEU 114	CPP 45	Colloids and Complex Liquids III – External Fields

DF

Sessions			
10:15	MÜL Elch	DF 13	Electrical and mechanical properties
11:20	MÜL Elch	DF 14	Dielectric composites and functionally graded materials; ceramics
10:45	ZEU 114	DF 15	Glasses and Glass Transition II (Joint Session of CPP, DY, DF)
14:15	MÜL Elch	DF 16	Dielectric surfaces and interfaces
14:00	HSZ 101	DF 17	Crystallography in Materials Science (Joint Session of KR, DF)
16:00	MÜL Elch	DF 18	Applications of dielectric solids

DS

Invited Talks, Topical Talks			
10:15	GER 37	DS 44.1	Electronic Properties of Metal Nanoclusters Measured by Low Energy Ion-Surface Charge Exchange •Jory Yarmoff
11:15	GER 37	DS 45.2	Energy dissipation in the scattering of N ₂ from W(110) •J. Inaki Juaristi
14:00	GER 37	DS 46.1	Structuring Graphene with He Ions •David C. Bell
14:45	GER 37	DS 47.1	Trails of kilovolt ions created by subsurface channeling •Thomas Michely, Alex Redinger, Sebastian Standop, Yudi Rosandi, Herbert Urbassek
15:15	GER 37	DS 47.2	The impact of fast ions in pulsed laser deposition •Michael Schmid
16:00	GER 37	DS 48.1	Ion beam doping of semiconductor nanowires •Carsten Ronning

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DS

17:45	GER 37	DS 49.1	Nano-scale surface modifications produced by highly charged ion impact •Friedrich Aumayr
10:15	GER 37	DS 44	Sessions Invited – Yarmoff
11:00	GER 37	DS 45	Ion Interactions with Nano Scale Materials I (Focused Session – Organisers: Diesing, Facsko)
14:00	GER 37	DS 46	Invited – Bell
14:45	GER 37	DS 47	Ion Interactions with Nano Scale Materials II (Focused Session – Organisers: Diesing, Facsko)
16:00	GER 37	DS 48	Ion Interactions with Nano Scale Materials III (Focused Session – Organisers: Diesing, Facsko)
17:45	GER 37	DS 49	Ion Interactions with Nano Scale Materials IV (Focused Session – Organisers: Diesing, Facsko)
10:15	GER 38	DS 50	Organic Electronics and Photovoltaics I (jointly with CPP, HL, and O)
12:00	GER 38	DS 51	Organic Electronics and Photovoltaics II (jointly with CPP, HL, and O)
14:00	GER 38	DS 52	Organic Electronics and Photovoltaics III (jointly with CPP, HL, and O)
16:15	GER 38	DS 53	Organic Electronics and Photovoltaics IV (jointly with CPP, HL, and O)
18:00	GER 38	DS 54	Nanoengineered Thin Films
14:30	POT 51	DS 55	Focused Session: Novel Green Laser Diodes (jointly with HL and O)
11:15	WIL A317	DS 56	Plasmonics and Nanophotonics O-VI (jointly with HL and O)
15:00	WIL A317	DS 57	Plasmonics and Nanophotonics O-VII (jointly with HL and O)

DY

16:30	HÜL 186	DY 33.10	Topical Talks Motion States in Intracellular Transport •Doris Heinrich
14:00	ZEU 255	DY 34.1	Dynamics of particles in turbulent flow: size matters •Holger Homann, Jérémie Bec, Rainer Grauer
10:15	HÜL 186	DY 28	Sessions Statistical Physics far from Equilibrium
10:15	ZEU 255	DY 29	Quantum Chaos I
10:15	ZEU 118	DY 30	Reaction-Diffusion Systems
10:45	ZEU 114	DY 31	Glasses and Glass Transition (jointly with CPP, DF)
10:15	ZEU 260	DY 32	Statistical Physics in Biological Systems III (organised by BP)
14:00	HÜL 186	DY 33	Brownian Motion, Stochastic Processes, Transport I
14:00	ZEU 255	DY 34	Fluid Dynamics and Turbulence II
14:30	BAR Schön	DY 35	ISS Transport and Localization of interacting Bosons II
14:00	ZEU 260	DY 36	Statistical Physics in Biological Systems IV (organised by BP)
16:00	ZEU 118	DY 37	Quantum Chaos II
16:30	ZEU 255	DY 38	Data Analysis and Stochastic Modeling I (jointly with UP)
17:00	ZEU 255	DY 39	Data Analysis and Stochastic Modeling II (jointly with UP)
17:00	P3	DY 40	Posters II
19:15	HÜL 186		Annual General Meeting of the Dynamics and Statistical Physics division

HL

14:30	POT 51	HL 80.1	Invited Talks GaN-based green laser diodes grown on c-plane GaN substrate •Shinichi Nagahama
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HL

15:00	POT 51	HL 80.2	Room-temperature CW operation of BeZnCdSe green laser diode •shigehisa tanaka, jun-ichi kasai, sumiko fujisaki, ryouichi akimoto, takeshi kikawa, shinji tsuji, haruhiko kuwatsuka, toshifumi hasama, hiroshi ishikawa
15:30	POT 51	HL 80.3	Growth and properties of semi-polar GaN on patterned silicon substrate •Nobuhiko Sawaki
16:15	POT 51	HL 80.4	Advantages of Using Semipolar Orientation for Making Green InGaN QW Laser Diodes. •Dmitry Sizov, Rajaram Bhat, Kechang Song, Chung-en Zah
16:45	POT 51	HL 80.5	Optical gain of green (Al,In)GaN laser diodes •Ulrich Schwarz

Sessions

10:15	FOE Anorg	HL 68	Photovoltaics: Chalcopyrites II
10:15	POT 51	HL 69	Nitrides: LEDs
10:15	POT 151	HL 70	Quantum Dots and Wires: Theory
10:15	POT 251	HL 71	Quantum Dots: Optical Properties
10:15	GER 38	HL 72	Joint Session: Organic Electronics and Photovoltaics I
12:00	GER 38	HL 73	Joint Session: Organic Electronics and Photovoltaics II
10:30	HSZ 02	HL 74	Joint Session: Quantum Optics of Solid State Photon Sources
11:15	TRE Phy	HL 75	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers V
11:45	POT 51	HL 76	Nitride-based Green Lasers
14:00	GER 38	HL 77	Joint Session: Organic Electronics and Photovoltaics III
16:15	GER 38	HL 78	Joint Session: Organic Electronics and Photovoltaics IV
14:30	FOE Anorg	HL 79	Photovoltaics: Mainly Silicon
14:30	POT 51	HL 80	Focussed Session: Novel Green Laser Diodes
14:30	POT 151	HL 81	Graphene: Transport
14:30	POT 251	HL 82	Ultrafast Phenomena
15:00	TRE Phy	HL 83	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers VI
17:15	TRE Phy	HL 84	Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers VII
17:15	POT 051		Annual General Meeting of the Semiconductor Physics division
18:00	P4	HL 85	Poster Session II

KR**Invited Talks**

14:00	HSZ 101	KR 7.1	Crystallography of Nanowires •Julian Stangl, Dominik Kriegner, Christian Panse, Bernhard Mandl, Kimberley A Dick, Mario Keplinger, Johan M Persson, Philippe Caroff, Daniele Ercolani, Lucia Sorba, Friedhelm Bechstedt, Günther Bauer
15:30	HSZ 101	KR 7.4	New Grounds in Materials Science: Complex Metallic Alloys •Michael Feuerbacher

Sessions

14:00	HSZ 101	KR 7	Crystallography in Materials Science (jointly with DF)
17:00	HSZ 101	KR 8	Annual General Meeting of the Crystallography division

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MA

Invited Talks, Topical Talks

- | | | | |
|-------|---------|---------|--|
| 10:15 | HSZ 04 | MA 47.1 | Perpendicular 40 nm MgO-CoFeB Magnetic Tunnel Junction
•Hideo Ohno |
| 14:00 | HSZ 04 | MA 53.1 | From nanolithography to energy assisted writing – what is the limit to magnetic recording?
•Bruce Terris |
| 14:30 | HSZ 04 | MA 53.2 | 29.5 Gb/in ² Recording Areal Density on Barium Ferrite Tape
•Mark Lantz |
| 15:15 | HSZ 403 | MA 57.1 | Simulations of X-ray Spectra using FEFF9 and OCEAN
•John Rehr |
| 15:45 | HSZ 403 | MA 57.2 | Polarisation dependent X-ray spectroscopy
•Andrei Rogalev, Fabrice Wilhelm, Jose Goulon |
| 16:15 | HSZ 403 | MA 57.3 | Theoretical description of X-ray absorption in correlated transition metal systems
•Hubert Ebert, Jan Minar, Ondrej Sipr |
| 17:00 | HSZ 403 | MA 57.4 | Paramagnetic molecules on metal surfaces: prototypes for spin-hybrid systems
•Heiko Wende |
| 17:30 | HSZ 403 | MA 57.5 | Can Carbon Be Ferromagnetic?
•Hendrik Ohldag, Elke Arenholz, Pablo Esquinazi, Daniel Spemann, Annette Setzer, Martin Rothermel, Tilman Butz |

Sessions

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|-------|---------|-------|--|
| 10:15 | HSZ 04 | MA 47 | Spintronics I/ Spin-dependent Transport/ Spin Torque – Invited Talk
SKM-SYDT: Diffusionless Transformations in Magnetic and Ferroelectric Bulk and Thin Films (jointly with MM, DS, DF) |
| 10:30 | TRE Ma | MA 48 | |
| 10:45 | HSZ 04 | MA 49 | Spin-dependent Transport/ Spin Torque |
| 11:00 | HSZ 103 | MA 50 | Surface magnetism III |
| 11:00 | HSZ 401 | MA 51 | Magnetic Half-metals and Oxides II |
| 11:00 | HSZ 403 | MA 52 | Magnetic Thin Films III |
| 14:00 | HSZ 04 | MA 53 | Magnetic Storage Media, Applications – Invited Talks |
| 15:00 | HSZ 04 | MA 54 | Spin Excitations I |
| 15:15 | HSZ 103 | MA 55 | Surface Magnetism IV |
| 15:15 | HSZ 401 | MA 56 | Graphene (jointly with DY, DS, HL, O, TT) |
| 15:15 | HSZ 403 | MA 57 | Focus Session “X-ray absorption spectra – state of the art of theory and experiment” (jointly with DS, HL, MM, O), Organization: Andreas Ney (Universität Duisburg-Essen) |
| 17:15 | HSZ 401 | MA 58 | Spintronics II (jointly with TT, HL) |
| 17:15 | HSZ 04 | MA 59 | Spin Excitations II/ Spin Scattering |
| 17:30 | HSZ 103 | MA 60 | Spin Structures and Magnetic Phase Transitions |

MM

Invited Talk, Topical Talks

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|-------|-------|---------|--|
| 10:15 | IFW A | MM 32.1 | Direct simulation of in-situ real time X-ray solidification experiment
•Charles-André Gandin, Guillaume Reinhart, Nathalie Mangelinck-Noël, Henri Nguyen-Thi, Bernard Billia, José Baruchel |
| 11:00 | IFW A | MM 33.1 | Playground magnetism in low-dimensions: impact of first-principles theory
•Stefan Blügel |
| 11:30 | IFW A | MM 33.2 | Metallic and half-metallic magnetism
•Jürgen Kübler |

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MM

12:00	IFW A	MM 33.3	Strain effects in magnetic and ferroelectric complex oxides from first principles •Claude Ederer
11:00	IFW D	MM 35.1	On selected methodological challenges at the interface between quantum-mechanical approaches and phase-field modeling methods in computational materials science •Martin Friak, Li-Fang Zhu, Alexey Dick, Alexander Udyansky, Johann von Pezold, Heike Emmerich, Jörg Neugebauer
14:00	IFW A	MM 36.1	Thermodynamics and Kinetics of Grain Boundary Junctions •Guenter Gottstein, Luis Barrales, Lasar S. Shvindlerman, Bingbing Zhao
14:30	IFW A	MM 36.2	High-performance permanent magnets – significance of thermodynamics, kinetics and microstructure •Gerhard Schneider, Dagmar Goll
14:00	IFW D	MM 38.1	Epitaxial films of the magnetic shape memory alloy Ni ₂ MnGa •Gerhard Jakob, Tobias Eichhorn, Richard Hausmanns, Peter Klaer, Michael Kallmayer, Hans-Joachim Elmers
15:30	IFW D	MM 38.6	Phase Transformations in Bi-based lead-free piezoceramics •Jürgen Rödel, Wook Jo

Sessions

10:15	IFW A	MM 32	HV Gandin
11:00	IFW A	MM 33	Topical Session Electron Theory IV
11:00	IFW B	MM 34	Nanomaterials I
11:00	IFW D	MM 35	Topical Session Heterogeneous Nucleation I
14:00	IFW A	MM 36	Topical Session Electron Theory V
14:00	IFW B	MM 37	Nanomaterials II
14:00	IFW D	MM 38	Topical Session Diffusionless Transformations I
16:15	IFW A	MM 39	Computational Materials Modelling V
16:15	IFW B	MM 40	Nanomaterials III
16:15	IFW D	MM 41	Topical Session Diffusionless Transformations II
17:45	IFW B	MM 42	Functional Materials I
18:00	IFW D	MM 43	Mechanical Properties II

O

Invited Talks, Topical Talks

10:15	TRE Phy	O 61.1	Novel properties of topological insulator thin films of Bi ₂ Te ₃ and Bi ₂ Se ₃ prepared by molecular beam epitaxy •Qikun Xue
11:15	TRE Phy	O 64.1	Electronic excitations in thin-film materials for solar cells: beyond standard density functional theory •Silvana Botti
14:00	TRE Phy	O 72.1	In-situ Study of Nanoparticle Shape Changes under Reaction Conditions •Andreas Stierle
17:15	TRE Phy	O 87.1	Continuum mechanics for quantum many-body systems: the anti-adiabatic approximation •Giovanni Vignale, Xianlong Gao, Jianmin Tao, Stefano Pittalis, Ilya Tokatly

Sessions

10:15	TRE Phy	O 61	Invited Talk (Qikun Xue)
10:15	GER 38	O 62	[DS] Organic Electronics and Photovoltaics I (jointly with CPP, HL, and O)
11:00	HSZ 103	O 63	[MA] Surface magnetism III

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O

11:15	TRE Phy	O 64	Focussed session: Theory and computation of electronic structure: new frontiers V (jointly with HL, DS)
11:15	PHY C213	O 65	Metal substrates: Adsorption of organic / bio molecules VII
11:15	WIL A317	O 66	Plasmonics and Nanooptics VI
11:15	WIL B321	O 67	Graphene IV
11:15	WIL B122	O 68	Polymeric biomolecular films
11:15	WIL C107	O 69	Electronic structure I
11:15	WIL C307	O 70	Gerhard Ertl Young Investigator Award
12:00	GER 38	O 71	[DS] Organic Electronics and Photovoltaics II (jointly with CPP, HL, and O)
14:00	TRE Phy	O 72	Invited Talk (Andreas Stierle)
14:00	GER 38	O 73	[DS] Organic Electronics and Photovoltaics III (jointly with CPP, HL, and O)
15:00	TRE Phy	O 74	Focussed session: Theory and computation of electronic structure: new frontiers VI (jointly with HL, DS)
15:00	PHY C213	O 75	Metal substrates: Adsorption of organic / bio molecules VIII
15:00	WIL A317	O 76	Plasmonics and Nanooptics VII
15:00	WIL B321	O 77	Graphene V
15:00	WIL B122	O 78	Surface chemical reactions
15:00	WIL C107	O 79	Electronic structure II
15:00	WIL C307	O 80	Epitaxy and growth: Metals and semiconductors I
15:15	HSZ 103	O 81	[MA] Surface magnetism IV
15:15	HSZ 401	O 82	[MA] Graphene (jointly with DY, DS, HL, O, TT)
15:15	HSZ 403	O 83	[MA] Focussed Session "X-ray absorption spectra – state of the art of theory and experiment" (jointly with DS, HL, MM, O)
16:15	GER 38	O 84	[DS] Organic Electronics and Photovoltaics IV (jointly with CPP, HL, and O)
16:30	WIL A317	O 85	Electron and spin dynamics I
16:30	WIL B122	O 86	Heterogeneous catalysis I
17:15	TRE Phy	O 87	Focussed session: Theory and computation of electronic structure: new frontiers VII (jointly with HL, DS)
17:15	PHY C213	O 88	Metal substrates: Adsorption of organic / bio molecules IX
17:15	WIL B321	O 89	Methods: other (experimental)
17:15	WIL C107	O 90	Electronic structure III
17:15	WIL C307	O 91	Epitaxy and growth: Oxides and insulators
19:30	TRE Phy	O 92	Annual General Meeting of the Surface Science division
20:00	TRE Phy	O 93	Post Deadline Session

SOE

Sessions

10:15	GÖR 226	SOE 18	Financial Markets and Risk Management I
14:00	GÖR 226	SOE 19	Economic Models and Evolutionary Game Theory II (with BP, DY)
15:00	GÖR 226	SOE 20	Networks: From Topology to Dynamics IV (with BP, DY)

TT

Invited Talks

10:30	HSZ 03	TT 45.1	Pairing fermions with population imbalance •Peter Fulde
11:00	HSZ 03	TT 45.2	Unconventional Superconductivity – Aspects of Symmetry and Topology •Manfred Sigrist

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TT

11:40	HSZ 03	TT 45.3	Large Scale Applications of Superconductors and the Challenges that they have posed •David Larbalestier
12:10	HSZ 03	TT 45.4	Weak Superconductivity and Superconductor Electronics •Konstantin Likharev
Sessions			
10:00	P1	TT 44	Poster Session Correlated Electrons
10:30	HSZ 03	TT 45	Focused Session: 100 Years of Superconductivity
10:30	HSZ 301	TT 46	SC: Tunneling, Josephson Junctions, SQUIDs 1
10:30	HSZ 304	TT 47	TR: Nanoelectronics I – Quantum Dots, Wires, Point Contacts 1
10:30	HSZ 105	TT 48	CE: Metal-Insulator Transition 2
14:00	HSZ 03	TT 49	CE: Spin Systems and Itinerant Magnets 2
14:00	HSZ 301	TT 50	SC: Tunneling, Josephson Junctions, SQUIDs 2
14:00	HSZ 304	TT 51	TR: Nanoelectronics I – Quantum Dots, Wires, Point Contacts 2
14:00	HSZ 105	TT 52	CE: Low-dimensional Systems – Models 1
15:15	HSZ 401	TT 53	Graphene (jointly with DY, DS, HL, MA, O)
15:30	HSZ 301	TT 54	SC: Heterostructures, Andreev Scattering, Proximity Effect
16:00	HSZ 304	TT 55	TR: Topological Insulators 1 (jointly with HL and MA)
16:30	HSZ 105	TT 56	CE: Heavy Fermions
17:15	HSZ 304	TT 57	SC: Fe-based Superconductors – 122 – Thin Films
17:30	HSZ 301	TT 58	SC: Vortex Dynamics, Vortex Phases, Pinning
19:00	HSZ 304		Annual General Meeting of the Low Temperature Physics division

SKM-SYDT

Invited Talks			
10:30	TRE Ma	SKM-SYDT 1.1	Domain boundaries as active elements in multiferroics and martensites: steps towards Domain Boundary Engineering •Ekhard K.H. Salje
11:00	TRE Ma	SKM-SYDT 1.2	Intermediate Phases in Perovskite Solid Solutions •Ian Reaney, Clive Randall, David Woodward
11:30	TRE Ma	SKM-SYDT 1.3	Adaptive martensite and giant strain effects in multiferroics •Ulrich K. Röbber
12:00	TRE Ma	SKM-SYDT 1.4	Nature of magnetic coupling in Ni-Mn-based martensitic Heusler alloys •Mehmet Acet, Seda Aksoy, Eberhard F. Wassermann, Lluís Manosa, Antoni Planes
12:30	TRE Ma	SKM-SYDT 1.5	Orthorhombic to tetragonal transition of SrRuO ₃ layers in Pr _{0.7} Ca _{0.3} MnO ₃ /SrRuO ₃ superlattices •Michael Ziese, Francis Bern, Ionela Vrejoiu, Eckhard Pippel, Elizaveta Nikulina
Session			
10:30	TRE Ma	SKM-SYDT 1	Diffusionless Transformations in Magnetic and Ferroelectric Bulk and Thin Films

SKM-SYMF

Invited Talks			
14:30	TRE Ma	SKM-SYMF 1.1	Visualizing the structural solid-liquid transition with colloidal suspensions •Peter Schall

Thursday, March 17, 2011

SKM-SYMF

- 15:00 TRE Ma SKM-SYMF 1.2 Crystallization process in suspensions of hard spheres
•Tanja Schilling, Hans-Joachim Schoepe, Martin Oettel, George Opletal, Ian Snook
- 15:30 TRE Ma SKM-SYMF 1.3 Homogeneous bulk, surface, and edge nucleation in crystalline nanodroplets
•Kari Dalnoki-Veress, Jessica Carvalho
- 16:00 TRE Ma SKM-SYMF 1.4 Polymer Crystallization: Ordered Structures in Complex Systems
•Jens-Uwe Sommer
- 16:30 TRE Ma SKM-SYMF 1.5 Phase formation and microstructure development in multicomponent alloys
•Jürgen Eckert
- Session**
- 14:30 TRE Ma SKM-SYMF 1 Heterogenous Nucleation and Microstructure Formation: Steps towards a System- and Scale-bridging Understanding
- Job Market**
- 13:00 HSZ E05 Boston Consulting:
“The Boston Consulting Group”
- 14:30 HSZ E05 BASF:
“BASF – The Chemical Company”

09:00 HSZ Foyer, Tent A, B, C Exhibition of scientific instruments and literature

20:00 HSZ 01 PV XXII **Max von Laue Talk (Entrance free)**
Redlichkeit in der Wissenschaft
•Siegfried Hunklinger

Friday, March 18, 2011

08:30	HSZ 01	PV XIII	Plenary Talk, Plenary Talk (SAMOP), Plenary Talk (SKM) Quantum light: Synthesis of complex microwave photon states with superconducting qubits •John Martinis
09:15	HSZ 02	PV XXIV	Coherent x-ray imaging for biomedical applications •Franz Pfeiffer
09:15	HSZ 01	PV XXV	Probing the energetics and dynamics of individual atomic spins on surfaces •Andreas Heinrich

SYQE

10:30	HSZ 01	SYQE 1.1	Invited Talks The driven Jaynes-Cummings system: from atoms and cavities to circuits •Howard Carmichael
11:00	HSZ 01	SYQE 1.2	Light shifts of ground-state quantum beats in Cavity QED, a consequence of quantum jumps. •Luis Orozco
11:30	HSZ 01	SYQE 1.3	Tomography and Correlation Function Measurements of Propagating Microwave Photons •Andreas Wallraff
12:00	HSZ 01	SYQE 1.4	Artificial atom in 1D open space •Yasunobu Nakamura
12:30	HSZ 01	SYQE 1.5	Quantum dot based bright sources of quantum light. •Pascale Senellart, Adrien Dousse, Jan Suffczynski, Vivien Loo, Steffen Michaelis de Vasconcellos, Olivier Gazzano, Loic Lanco, Aristide Lemaitre, Isabelle Sagnes, Alexios Beveratos, Olivier Krebs, Jacqueline Bloch, Paul Voisin
10:30	HSZ 01	SYQE 1	Session Cavity meets Circuit Quantum Electrodynamics

ISS

10:30	BAR 205	ISS 10	Session Nano Plasmonic (A, HL)
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AGA

10:00	MENSA Dül	AGA 5.1	Invited Talks The UK-Norway initiative for verification of nuclear warhead dismantlement -- Lessons Learned •Steinar Høibråten
11:00	MENSA Dül	AGA 5.2	Nuclear Safeguards R & D Structure in Germany: Coordinating the German Support Programme to the IAEA •Irmgard Niemeyer, Martin Dürr, Bernd Richter
10:00	MENSA Dül	AGA 5	Session Nuclear Verification and Detection

Friday, March 18, 2011

A**Invited Talks**

- 10:30 BAR 106 A 14.1 Synchrotron radiation spectroscopy of ions
•Alfred Müller
- 11:00 BAR 106 A 14.2 Doppler effect in fragment autoionization following core-to-valence excitation in molecular oxygen.
•Marc Simon, Renaud Guillemin, Eiji Shigemasa
- 10:30 BAR 205 A 27.1 Plasmon Driven Higher Harmonics Generation
•Seung-Woo Kim, In-Yong Park, Seungchul Kim, Joon-Hee Choi
- 11:00 BAR 205 A 27.2 Structure and Dynamics of Free Nanoparticles: From Charging to Time-Resolved Photoemission
•Eckart Rühl
- 11:30 BAR 205 A 27.3 Terahertz Nano Plasmonics
•Dai-Sik Kim
- 12:00 BAR 205 A 27.4 Coulomb complexes: Electron emission from clusters in strong FEL pulses
•Ulf Saalman
- 12:30 BAR 205 A 27.5 Appearance of Surface and Volume Plasmons in Fullerenes
•Sanja Korica, Axel Reinköster, Markus Braune, Jens Viefhaus, Daniel Rolles, G. Fronzoni, D. Toffoli, M. Stener, P. Decleva, O. Al-Dossary, Burkhard Langer, Uwe Becker

Sessions

- 10:30 BAR 106 A 14 Interaction with VUV and X-ray light III
- 10:30 BAR 205 A 27 Nano Plasmonic (with HL)
- 10:30 HSZ 02 A 29 Ultracold Atoms: Trapping and Cooling 2 (with Q)

MO**Sessions**

- 10:30 TOE 317 MO 34 Photochemistry
- 10:30 MER 02 MO 35 Spectroscopy in He Droplets

MS**Invited Talk**

- 10:30 GÖR 229 MS 9.1 Power-law decays of excited aluminum cluster anions and their blackbody radiation dependence
•Michael Froese, Felix Berg, Klaus Blaum, Michael Lange, Felix Laux, Sebastian Menk, Robert von Hahn, Andreas Wolf

Session

- 10:30 GÖR 229 MS 9 Ion Trap and FT-ICR-MS, Molecules, Clusters and Reactions

Q**Sessions**

- 10:30 HSZ 02 Q 58 Ultracold Atoms: Trapping and Cooling 2
- 10:30 SCH A01 Q 59 Quantum Effects: Interference and Correlations
- 10:30 SCH 251 Q 60 Quantum Information: Photons and Nonclassical Light 2
- 10:30 SCH A118 Q 61 Quantum Information: Concepts and Methods 4
- 10:30 HÜL 386 Q 62 Laseranwendungen: Lebenswiss. und Umweltphys.
- 10:30 SCH A215 Q 63 Ultrakurze Laserpulse: Erzeugung und Anwendungen 2
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Friday, March 18, 2011

BP

Invited Talks

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|-------|---------|---------|---|
| 10:15 | ZEU 250 | BP 33.1 | Clamping DNA Strands Together: The Mechanics of Single-strand Annealing
•Erik Schäffer, Marcel Ander |
| 10:15 | ZEU 260 | BP 34.1 | Super-resolution fluorescence imaging of cellular structure and dynamics
•Markus Sauer, Sebastian van de Linde, Teresa Klein, Anna Löschberger, Thorge Holm, Sven Proppert |

Sessions

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|-------|---------|-------|--|
| 10:15 | ZEU 250 | BP 33 | Biological Machines & Motor Proteins |
| 10:15 | ZEU 260 | BP 34 | New Technologies |
| 10:30 | TRE Ma | BP 35 | SYBE: Statistical Physics and Biological Evolution |
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CPP

Topical Talk

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|-------|---------|----------|---|
| 10:30 | ZEU 222 | CPP 46.1 | Droplet-based microfluidics and the dynamics of emulsions
•Jean-Christophe Baret |
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Sessions

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|-------|---------|--------|--|
| 10:30 | ZEU 222 | CPP 46 | Micro- and Nanofluidics II |
| 10:30 | ZEU 160 | CPP 47 | Heterogeneous Nucleation and Microstructure Formation (related to SYMF, jointly with MM) |
| 10:30 | ZEU 114 | CPP 48 | Nanoparticles and Composite Materials II |
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DS

Invited Talk, Topical Talks

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|-------|--------|---------|--|
| 10:15 | GER 37 | DS 58.1 | Development of Highly Efficient IV-VI Thermoelectric Materials
•Yaniv Gelbstein |
| 11:00 | GER 37 | DS 59.1 | Nanocrystalline silicon for thermoelectricity
•Gabi Schierning |
| 11:30 | GER 37 | DS 59.2 | Nanoscale Thermoelectrics
•Jan D. König |
| 12:00 | GER 37 | DS 59.3 | Thermal transport and thermoelectric effect in thin semiconductor membranes
•Matthias Schmidt, Thorben Bartsch, Christian Heyn, Wolfgang Hansen |
| 12:30 | GER 37 | DS 59.4 | Theoretical studies of electrical cross-plane transport in semiconductor multilayer heterostructures
•Peter Kratzer, Vladimir M. Fomin |

Sessions

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|-------|--------|-------|---|
| 10:15 | GER 37 | DS 58 | Invited – Gelbstein |
| 11:00 | GER 37 | DS 59 | Thermoelectric Materials, Thin Films, and Nanostructures I (Focused Session – Organisers: Nielsch, Rastelli, Balke) |
| 14:00 | GER 37 | DS 60 | Thermoelectric Materials, Thin Films, and Nanostructures II (Focused Session – Organisers: Nielsch, Rastelli, Balke) |
| 16:00 | GER 37 | DS 61 | Thermoelectric Materials, Thin Films, and Nanostructures III (Focused Session – Organisers: Nielsch, Rastelli, Balke) |
| 10:15 | GER 38 | DS 62 | Organic Thin Films I |
| 12:00 | GER 38 | DS 63 | Organic Thin Films II |
| 14:00 | GER 38 | DS 64 | Organic Thin Films III |
| 16:00 | GER 38 | DS 65 | Organic Thin Films IV |

Friday, March 18, 2011

DS

11:15 WIL B122 DS 66 Organic Electronics and Photovoltaics O-I (jointly with CPP, HL, and O)

DY

Sessions

10:15 HÜL 186 DY 41 Brownian Motion, Stochastic Processes, Transport II
10:15 ZEU 255 DY 42 Critical Phenomena and Phase Transitions
10:15 ZEU 118 DY 43 Soft Matter

HL

Sessions

10:15 FOE Anorg HL 86 Quantum Dots: Growth and Characterization
10:15 POT 51 HL 87 ZnO: Growth and Defects
10:15 POT 151 HL 88 Lasers
10:15 POT 251 HL 89 Optical Properties II
10:30 BAR 205 HL 90 Intersectional Joint Session: Nano Plasmonic
11:15 TRE Phy HL 91 Joint Focussed Session: Theory and Computation of Electronic Structure: New Frontiers VIII

MA

Invited Talk

10:15 HSZ 04 MA 61.1 Spin-dependent quantum interference within a single magnetic nanostructure
•Dirk Sander, Hirofumi Oka, Pavel Ignatiev, Sebastian Wedekind, Guillemín Rodary, Larissa Niebergall, Valeri Stepanyuk, Jürgen Kirschner

Sessions

10:15 HSZ 04 MA 61 Surface Magnetism V – Invited Talk
10:45 HSZ 04 MA 62 Magnetic Imaging
11:00 P2 MA 63 Poster II (Surface Magnetism/ Magnetic Imaging/ Topological Insulators/ Spin Structures and Magnetic Phase Transitions/ Graphene/ Magnetic Thin Films/ Magnetic Semiconductors/ Magnetic Half-metals and Oxides/ Spin-dependent Transport/ Spin Excitations and Spin Torque/ Spin Injection and Spin Currents in Heterostructures/ Spintronics/ Magnetic Storage and Applications)

MM

Sessions

10:30 IFW A MM 44 Functional Materials II
10:30 IFW B MM 45 Topical Session Heterogeneous Nucleation II
10:30 IFW D MM 46 Mechanical Properties III

O

Invited Talks, Topical Talk

10:15 TRE Phy O 94.1 Computational study of optical and structural properties of an organic dye sensitized solar cell
•Ralph Gebauer, Filippo De Angelis
11:15 TRE Phy O 96.1 Tunable bandgaps and excitons in doped semiconducting carbon nanotubes made possible by acoustic plasmons
•Catalin Spataru, Francois Leonard

Friday, March 18, 2011

O

13:15	TRE Phy	O 103.1	Beat the heat! First-principles based modeling of micro- and macroscopic heat dissipation in heterogeneous catalysis •Karsten Reuter
Sessions			
10:15	TRE Phy	O 94	Invited Talk (Ralph Gebauer)
10:15	HSZ 04	O 95	[MA] Surface magnetism V
11:15	TRE Phy	O 96	Focussed session: Theory and computation of electronic structure: new frontiers VIII (jointly with HL, DS)
11:15	PHY C213	O 97	Heterogeneous catalysis II
11:15	WIL A317	O 98	Graphene VI
11:15	WIL B321	O 99	Electron and spin dynamics II
11:15	WIL B122	O 100	Organic electronics and photovoltaics
11:15	WIL C107	O 101	Particles and clusters II
11:15	WIL C307	O 102	Epitaxy and growth: Metals and semiconductors II
13:15	TRE Phy	O 103	Invited Talk (Karsten Reuter)

SOE

Sessions			
10:15	GÖR 226	SOE 21	Traffic Dynamics, Urban and Regional Systems
11:15	GÖR 226	SOE 22	Social Systems, Opinion and Group Dynamics II

TT

Invited Talk			
11:00	HSZ 301	TT 60.3	Engineering Atomic-Scale Spin Systems •Sebastian Loth
Sessions			
10:30	HSZ 03	TT 59	TR: Topological Insulators 2 (jointly with HL and MA)
10:30	HSZ 301	TT 60	SC & MLT: Cryodetectors
10:30	HSZ 304	TT 61	TR: Nanoelectronics I – Quantum Dots, Wires, Point Contacts 3
10:30	HSZ 105	TT 62	CE: Low-dimensional Systems – Models 2

SKM-SYBE

Invited Talks			
10:30	TRE Ma	SKM-SYBE 1.1	Microbial evolution in spatially-structured environments •Arjan de Visser
11:00	TRE Ma	SKM-SYBE 1.2	Correlated mutations: Facts or artifacts? •Amnon Horovitz
11:30	TRE Ma	SKM-SYBE 1.3	Macroscopic laws in bacterial genome evolution •Erik van Nimwegen
12:00	TRE Ma	SKM-SYBE 1.4	The role of horizontal gene transfer in the evolution of bacterial genomes •Paul Higgs
Session			
10:30	TRE Ma	SKM-SYBE 1	Statistical Physics and Biological Evolution
