

# Österreichische Physikalische Gesellschaft

## 64. Jahrestagung

24.–27. September 2014

ECHOPHYSICS – Europäisches Zentrum f. Physikgeschichte

Schloss 1, 8225 Pöllau b. Hartberg, Steiermark

### Programmübersicht

#### Energietag 2014

Mittwoch/Wednesday, 24.09.2014, 10-16:45, Festsaal Schloss Pöllau

Zeit time	ID	Vortrag / Presentation
10:00		<b>Eröffnung der Veranstaltung und Begrüßung der Gäste / Opening of the event and welcoming of participants</b>
10:15	E T01	<b>Historical aspects of the concept of energy</b> <i>Alessandro Pascolini</i>
11:00	E T02	<b>Energie, Wirtschaft und Gesellschaft: eine Zeitreise</b> <i>Werner Watzenig</i>
11:45 12:14		Kaffeepause / Coffee break
12:15	E T03	<b>Zur Geschichte der Mobilität – Entwicklung, Barrieren und Chancen</b> <i>Harald Frey</i>
13:00 14:29		Mittagspause / Lunch break
14:30	E T04	<b>Erdgasversorgung in Österreich</b> <i>Andreas Lederbauer</i>
15:15	E T05	<b>Wegkreuzungen mit Information und Kommunikation</b> <i>Helmut Malleck</i>
16:00	E T06	<b>Geschichte der Kernenergie</b> <i>Helmuth Böck</i>
16:45		Ende der Veranstaltung / End of the event
17:00 - 18:30		<b>Umtrunk und Ausstellungsbesuch ECHOPHYSICS</b>
19:00 - 20:00	A T01	<b>Öffentlicher Abendvortrag: Festsaal Schloss Pöllau</b> <b>Univ.-Prof. Dr. Friedrich Wagner</b> <i>Max-Planck-Institut für Plasmaphysik, Teilinstitut Greifswald</i> <b>Die Energiewende Deutschlands – wohin wird sie führen?</b>

# COND

Mittwoch/Wednesday, 24.09.2014, 10-13, 14-18:30, Refektorium

Zeit time	ID	<b>COND, Session 1</b> <b>Chair: Ulrike Diebold</b>
10:00	CM T11	<b>Functional molecules on surfaces: From conducting wires to the role of single atoms</b> <i>Leonhard Grill</i>
10:30	CM T12	<b>Ordered Indium adatoms on the reduced In<sub>2</sub>O<sub>3</sub>(111) surface</b> <i>Margareta Wagner, Steffen Seiler, Bernd Meyer, Lynn A. Boatner, Michael Schmid and Ulrike Diebold</i>
10:45	CM T13	<b>Growth and characterization of the p-type transparent conducting oxide ZnCo<sub>2</sub>O<sub>4</sub></b> <i>Bastian Henne, Verena Ney, Fabrice Wilhelm, Katharina Ollefs, Andrei Rogalev and Andreas Ney</i>
11:00	CM T14	<b>The structure of the Fe<sub>3</sub>O<sub>4</sub>(001) surface</b> <i>Roland Bliem, Eamon McDermott, Pascal Ferstl, Oscar Gamba, M. Alexander Schneider, Michael Schmid, Peter Blaha, Ulrike Diebold, Lutz Hammer and Gareth Parkinson</i>
11:15	CM T15	<b>Adsorption of formic acid and Methanol on the Magnetite (001) surface</b> <i>Oscar Gamba, Roland Bliem, Heshmat Noei, Andreas Stierle, Michael Schmid, Ulrike Diebold and Gareth Parkinson</i>
11:30 11:59		Kaffeepause / Coffee break
Zeit time	ID	<b>COND, Session 2</b> <b>Chair: Adolf Winkler</b>
12:00	CM T21	<b>Enhancing the reactivity of a Perovskite surface: Deposition of Sr-adatoms and NiO-clusters onto SrTiO<sub>3</sub>(110)-(4×1) surface</b> <i>Stefan Gerhold, Zhiming Wang, Michele Riva, Xianfeng Hao, Cesare Franchini, Karina Schulte, Michael Schmid and Ulrike Diebold</i>
12:15	CM T22	<b>Development and character of gap states on alkali doping of Sexiphenyl films</b> <i>Eva M. Reinisch, Thomas Ules, Peter Puschnig, Stephen Berkebile, Markus Ostler, Thomas Seyller, Michael Ramsey and Georg Koller</i>
12:30	CM T23	<b>Alkali metal doped para-sexiphenyl monolayers and thin films on Al(110): an angle resolved UV photoemission study</b> <i>Hannes Offenbacher, Georg Koller, Thomas Ules, Eva Reinisch, Peter Puschnig and Michael Ramsey</i>
12:45	CM T24	<b>Organic thin film transistors under ultra-high vacuum conditions: Deposition and device temperature dependent in-situ electrical and surface analytical characterization</b> <i>Roman Lassnig, Michael Hollerer, Bernd Striedinger, Alexander Fian, Barbara Stadlober and Adolf Winkler</i>
13:00 13:59		Mittagspause / Lunch break

Zeit time	ID	<b>COND, Session 3</b> <b>Chair: Peter Hadley</b>
14:00	CM T31	<b>Lattice simulation of Dirac fermions without fermion doubling: application to spintronics</b> <i>Rene Hammer</i>
14:30	CM T32	<b>Modeling of Ohmic contacts of nano-devices within the Lindblad equation</b> <i>Walter Poetz</i>
14:45	CM T33	<b>First-principles investigation of crystalline topological insulators Pb1 xSnx(Se,Te)</b> <i>Kerstin Hummer, Marta Galicka, Ryszard Buczko and Georg Kresse</i>
15:00	CM T34	<b>Formation of mono- and bi-metallic nanowires in vortices in superfluid He nanodroplets</b> <i>Philipp Thaler, Alexander Volk, Florian Lackner, Johannes Steurer, Daniel Knez, Werner Grogger, Ferdinand Hofer and Wolfgang E. Ernst</i>
15:15	CM T35	<b>HR-STEM investigations of metallic nanoparticles grown with superfluid He-droplets</b> <i>Daniel Knez, Philipp Thaler, Alexander Volk, Werner Grogger, Wolfgang E. Ernst and Ferdinand Hofer</i>
15:30	CM T36	<b>Investigations of defects in semiconductors</b> <i>Martin Faccinelli, Stefan Kirnstoetter and Peter Hadley</i>
15:45	CM T37	<b>Investigation of performance limiting point defects at semiconductor-oxide interfaces using electrically detected magnetic resonance</b> <i>Gernot Gruber, Markus Koch and Peter Hadley</i>
16:00 16:29		Kaffeepause / Coffee break
Zeit time	ID	<b>COND, Session 4</b> <b>Chair: Oskar Paris</b>
16:30	CM T41	<b>High Precision Experiments with Cold and Ultra-Cold Neutrons</b> <i>Hartmut Abele</i>
17:00	CM T42	<b>Methodische Entwicklungen in der Neutronenultrakleinwinkelstreuung</b> <i>Erwin Jericha, Wilfried Mach, Tobias Rechberger, Alexander Zdarzil and Gerald Badurek</i>
17:15	CM T43	<b>Detailed shape retrieval of colloidal inorganic nanocrystals from SAXS-data</b> <i>Max Burian, Gerhard Fritz-Popovski, Oskar Paris and Rainer T. Lechner</i>
17:30	CM T44	<b>Metastable crystal phase in the shell of PbS/CdS core/shell nanocrystals</b> <i>Rainer T. Lechner, Gerhard Fritz-Popovski, Maksym Yarema, Wolfgang Heiss and Oskar Paris</i>
17:45	CM T45	<b>In-situ SAXS/WAXS as a novel method to study ion transport phenomena in confined geometry</b> <i>Christian Prehal, Daniel Weingarth, Emilie Perre, Rainer T. Lechner, Heinz Amenitsch, Oskar Paris and Volker Presser</i>

18:00	CM T46	<b>Raman investigation of Tannin based rigid foams</b> <i>Andreas Reyer, Gianluca Tondi, Alexander Petutschnigg, Martin Demker and Maurizio Musso</i>
18:15	CM T47	<b>Inelastic HAS intensities on Sb(111): Indication of a low-lying acoustic plasmon mode</b> <i>Patrick Kraus, Florian Apolloner, Christian Gösweiner, Giorgio Benedek and Wolfgang E. Ernst</i>
18:30		<b>Ende der Veranstaltung / End of session</b>

## COND

*Donnerstag/Thursday, 24.09.2014, 15-16:45, Festsaal Sparkasse*

Zeit time	ID	<b>COND, Session 5</b> <b>Chair: Walter Poetz</b>
15:00	CM T51	<b>Hidden Scale Invariance in Metallic Elements</b> <i>Felix Hummel, Georg Kresse, Jeppe Dyre and Ulf Pedersen</i>
15:15	CM T52	<b>Density determination of liquid metals</b> <i>Alexander Schmon, Kirmanj Aziz and Gernot Pottlacher</i>
15:30	CM T53	<b>In-situ electrodeposition of Co in a SQUID magnetometer to study the absolute magnetic moment of ultrathin Co layers</b> <i>Stefan Toplovec, Heinz Krenn (2) and Roland Würschum</i>
15:45	CM T55	<b>Plasmon dispersion and lifetime in the two-dimensional electron liquid</b> <i>Jürgen Thomas Drachta, Dominik Kreil, Raphael Hobbiger and Helga M. Böhm</i>
16:00	CM T56	<b>Correlated photons from microcavity polaritons</b> <i>Patrick Mai, Mathias Sassermaun, Zoltán Vörös, Gregor Weihs and Wolfgang Langbein</i>
16:15	CM T57	<b>Chromium on superfluid Helium nanodroplets: Theoretical investigation of the ground state and selected excited states</b> <i>Martin Ratschek, Johann V. Pototschnig, Andreas W. Hauser and Wolfgang E. Ernst</i>
16:30	CM T58	<b>Novel exact closed-form solutions for the resonant frequencies and mode-shapes of Euler-Bernoulli beams with constant thickness and polynomial width</b> <i>Roman Beigelbeck, Michael Schneider, Michael Stifter, Thomas Voglhuber-Brunnmaier, Bernhard Jakoby, Ulrich Schmid and Franz Keplinger</i>
16:45		<b>Ende der Veranstaltung / End of session</b>

## COND

Donnerstag/Thursday, 24.09.2014, 15-16:45, Festsaal Rathaus

Zeit time	ID	<b>COND, Session 6</b> <b>Chair: Rainer Lechner</b>
15:00	CM T61	<b>A simple model to study the influence of topology and distribution of reversible sacrificial bonds on the mechanical behavior of polymers</b> <i>S. Soran Nabavi and Markus A. Hartmann</i>
15:15	CM T62	<b>A tubular resonator operated in wall-thickness-mode for simultaneous longitudinal viscosity and speed of sound sensing of liquids</b> <i>Thomas Voglhuber-Brunnmaier, Roman Beigelbeck, Hannes Antlinger, Stefan Clara, Samir Cerimovic, Bernhard Jakoby and Franz Keplinger</i>
15:30	CM T63	<b>Analysis of the propagation of electromagnetic waves in inhomogeneous solids for applications in mining</b> <i>Ronald Meisels, Michael Toifl, Philipp Hartlieb, Friedemar Kuchar and Thomas Antretter</i>
15:45	CM T64	<b>Characterisation of microfiltration membranes by wetting investigations in the ESEM</b> <i>Manfred Nachtnebel and Peter Pölt</i>
16:00	CM T65	<b>Experimental and computational aspects of analytical electron tomography and its application to nanomaterials</b> <i>Angelina Orthacker, Georg Haberfehlner, Johannes Tändl, Cecilia Poletti and Gerald Kothleitner</i>
16:15	CM T66	<b>Analysis of amorphous-nanocrystalline silicon thin films by time-of-flight elastic recoil detection analysis and high-resolution electron microscopy</b> <i>Krunoslav Juraić, Davor Gracin, Zdravko Siketić and Miran Čeh</i>
16:30	CM T68	<b>Initial film growth studies of indigo on SiO<sub>2</sub></b> <i>Boris Scherwitzl, Adolf Winkler and Roland Resel</i>
16:45		<b>Ende der Veranstaltung / End of session</b>

## COND Poster

Donnerstag/Thursday, 24.09.2014, 18-19:30, Schloss Pöllau

ID	<b>COND, Poster</b> <b>Chair: NN</b>
CM P01	<b>Tuning mesoporous silica films properties by Deep X-ray Lithography for fluidics applications</b> <i>Benedetta Marmiroli, Barbara Sartori and Heinz Amenitsch</i>
CM P02	<b>Measurement of selective adsorption resonance lifetimes from drift spectra of <sup>4</sup>He-Sb(111)</b> <i>Florian Apolloner, Patrick Kraus, Christian Gösweiner, Michael Mayrhofer-Reinhartshuber, Salvador Miret-Artés and Wolfgang E. Ernst</i>

CM P03	<p><b>Effect of humidity and salts on the mesostructure of silica nanoparticles synthesized in the gas phase</b></p> <p><i>Barbara Sartori, Benedetta Marmiroli, Fernando Cacho-Nerin and Heinz Amenitsch</i></p>
CM P04	<p><b>Sorption-induced deformation of hierarchical silica-based monoliths</b></p> <p><i>Roland Johann Morak, Christian Balzer, Maxim Erko, Christos Triantafyllidis, Nicola Hüsing, Gudrun Reichenauer and Oskar Paris</i></p>
CM P05	<p><b>Characterization of Li charging state of <math>\text{Li}_{1-x}\text{CoO}_2</math> battery cathodes by means of SQUID magnetometry</b></p> <p><i>Gregor Klinser, Stefan Topolovec, Heinz Krenn, Harald Kren, Stefan Koller and Roland Würschum</i></p>
CM P06	<p><b>Transport simulations of Dirac Fermions on surfaces of topological insulators</b></p> <p><i>Walter Poetz and Magdalena Schreilechner</i></p>
CM P07	<p><b>Inelastic close coupling calculations reproducing temperature dependency of helium atom scattering experiments on pnictogen surfaces</b></p> <p><i>Christian Gösweiner, Patrick Kraus, Florian Apolloner, Salvador Miret-Artès and Wolfgang E. Ernst</i></p>
CM P08	<p><b>Development of a molecular beam for surface reactivity studies</b></p> <p><i>Daniel Halwidl, Jiri Pavelec, Jan Hulva, Florian Brunbauer, Michael Schmid, Gareth Parkinson and Ulrike Diebold</i></p>
CM P09	<p><b>Contact charging of mineral particles studied by Kelvin Probe Force Microscopy</b></p> <p><i>Stefan Klima, Monika Mirkowska and Christian Teichert</i></p>
CM P10	<p><b>Setup of the machine for reactivity studies</b></p> <p><i>Jiri Pavelec, Daniel Halwidl, Jan Hulva, Michael Schmid, Gareth Parkinson and Ulrike Diebold</i></p>
CM P11	<p><b>AFM morphology investigation of pentacene films in electrode-dielectric transition area</b></p> <p><i>Michael Hollerer, Roman Lassnig, Adolf Winkler, Bernd Striedinger, Alexander Fian and Barbara Stadlober</i></p>
CM P12	<p><b>AFM studies of adsorbed xylan on amorphous cellulose films using functionalized tips</b></p> <p><i>Caterina Czibula, Christian Ganser, Albrecht Miletzky, Stefan Spirk, Robert Schennach and Christian Teichert</i></p>
CM P13	<p><b>Switching single molecules on a metal surface</b></p> <p><i>Simon Jaekel, Knud Seufert, Christophe Nacci and Leonhard Grill</i></p>
CM P14	<p><b>MEMS-Magnetfeld Detektion</b></p> <p><i>Michael Stifter, Harald Steiner, Wilfried Hortschitz, Thilo Sauterand Franz Keplinger</i></p>

# FAKT

Mittwoch/Wednesday, 24.09.2014, 10-13, 14-18:30, Festsaal RAIKA

Zeit time	ID	<b>FAKT, Fundamental interactions</b> <b>Chair: Eberhard Widmann</b>
10:00	FAKT T11	<b>Latest results of the CRESST-II experiment</b> <i>Achim Gütlein and Holger Kluck</i>
10:15	FAKT T12	<b>Search for the violation of the Pauli Exclusion Principle with electrons</b> <i>Andreas Pichler, Hexi Shi and Johann Marton</i>
10:30	FAKT T13	<b>Measuring the ground state hyperfinestructure of antihydrogen</b> <i>Clemens Sauerzopf, Martin Diermaier, Bernadette Kolbinger, Sebastian Lehner, Chloé Malbrunot, Oswald Massiczek, Martin Simon, Eberhard Widmann and Johann Zmeskal</i>
10:45	FAKT T14	<b>Hyperfine spectroscopy setup for antihydrogen and first results with a hydrogen beam</b> <i>Martin Diermaier, Peter Caradonna, Christoph Klaushofer, Chloe Malbrunot, Oswald Massiczek, Clemens Sauerzopf, Martin Simon, Michael Wolf, Johann Zmeskal and Eberhard Widmann</i>
11:00	FAKT T15	<b>Precision measurements of neutron beta decay</b> <i>Gertrud Konrad</i>
11:15 11:44		Kaffeepause / Coffee break
Zeit time	ID	<b>FAKT, Fundamental interactions</b> <b>Chair: Christoph Schwanda</b>
11:45	FAKT T21	<b>qBOUNCE: Frequency's view on Newton's Law</b> <i>Gunther Cronenberg, Hanno Filter, Peter Goldenbort, Tobias Jenke, Martin Thalhammer and Hartmut Abele</i>
12:00	FAKT T22	<b>Oscillations in the exponential power-law in electron capture decays of hydrogen-like ions</b> <i>Christoph Klaushofer and Paul Bühler</i>
Zeit time	ID	<b>FAKT, Theory: Gravity</b> <b>Chair: NN</b>
12:15	FAKT T23	<b>Conformal gravity holography in four dimensions</b> <i>Daniel Grumiller, Maria Irakleidou, Iva Lovrekovic and Robert McNees</i>
12:30	FAKT T24	<b>Canonical charges and asymptotic symmetries in four dimensional conformal gravity holography</b> <i>Daniel Grumiller, Maria Irakleidou, Iva Lovrekovic, Robert McNees and Florian Preis</i>
12:45	FAKT T25	<b>Higher-Spin Gravity in 2+1 Dimensions</b> <i>Max Riegler</i>
13:00 13:59		<b>Mittagspause/Lunch break</b>

Zeit time	ID	<b>FAKT, Theory: Gravity</b> <b>Chair: NN</b>
14:00	FAKT T31	<b>Numerical relativity in asymptotic anti-de Sitter spacetimes</b> <i>Christian Ecker</i>
Zeit time	ID	<b>FAKT, Theory: QCD</b> <b>Chair: NN</b>
14:15	FAKT T32	<b>Holographic Glueball Decay</b> <i>Frederic Brünner, Denis Parganlija and Anton Rebhan</i>
14:30	FAKT T33	<b>Effective mass signatures in multiphoton pair production</b> <i>Christian Kohlfürst, Holger Gies and Reinhard Alkofer</i>
14:45	FAKT T34	<b>Heavy quarkonia in a sophisticated Bethe-Salpeter-equation meson model</b> <i>Thomas Hilger</i>
15:00	FAKT T35	<b>A new strategy for hadron phenomenology with the DS-BS-equation approach</b> <i>Andreas Krassnigg</i>
15:15	FAKT T36	<b>Non-perturbative propagators and running coupling in the conformal window of QCD</b> <i>Reinhard Alkofer, Christian S. Fischer and Markus Hopfer</i>
15:30 15:59		Kaffeepause / Coffee break
Zeit time	ID	<b>FAKT, Collider physics</b> <b>Chair: Dietmar Kuhn</b>
16:00	FAKT T41	<b>ATLAS Inner Tracking detectors: Run 1 performance and developments for Run 2</b> <i>Wolfgang Lukas</i>
16:15	FAKT T42	<b>Measurement of the decay <math>B \rightarrow D l \nu</math> in fully reconstructed events and determination of the CKM matrix element <math>V_{cb}</math> at Belle</b> <i>Robin Glattauer</i>
16:30	FAKT T43	<b>Measurement of the decay <math>B_0^s \rightarrow J/\psi \phi(1020)</math></b> <i>Lukas Lechner, Felicitas Andrea Thorne and Christoph Schwanda</i>
16:45	FAKT T44	<b>Measurement of the decay <math>B_0^s \rightarrow D_s^- \pi^+</math> at the Belle experiment</b> <i>David Bricher, Felicitas Andrea Thorne and Christoph Schwanda</i>
Zeit time	ID	<b>FAKT, Collider detectors</b> <b>Chair: NN</b>
17:00	FAKT T45	<b>Time resolution studies for the PANDA time-of-flight detector using SiPM</b> <i>Lukas Gruber, Stefan Enrico Brunner, Johann Marton, Herbert Orth and Ken Suzuki</i>
17:15	FAKT T46	<b>The Data Acquisition and Preprocessing System of the Belle II Silicon Vertex Detector</b> <i>Richard Thalmeier, Thomas Bergauer, Florian Buchsteiner, Friedl Markus, Christian Irmeler, Katsuro Nakamura, Siegfried Schmid, Helmut Steininger and Hao Yin</i>



17:30	FAKT	<b>FAKT Versammlung</b>
18:30		
18:30		<b>Ende der Veranstaltung / End of session</b>
19:00 - 20:00	A T01	<p><b>Öffentlicher Abendvortrag: Festsaal Schloss Pöllau</b></p> <p><b>Univ.-Prof. Dr. Friedrich Wagner</b></p> <p><i>Max-Planck-Institut für Plasmaphysik, Teilinstitut Greifswald</i></p> <p><b>Die Energiewende Deutschlands – wohin wird sie führen?</b></p>

## FAKT Poster

*Donnerstag / Thursday, 25.09.2014, 18-19:30, Schloss Pöllau*

ID	<b>FAKT, Poster</b> Chair: NN	
FAKT P01	<p><b>Simulations for the measurement of the groundstate hyperfinestructure of antihydrogen</b></p> <p><i>Clemens Sauerzopf</i></p>	
FAKT P02	<p><b>A detector for in-beam measurements of the groundstate hyperfinestructure of antihydrogen</b></p> <p><i>Clemens Sauerzopf</i></p>	
FAKT P03	<p><b>Non-Standard Model physics in neutron beta decay</b></p> <p><i>Daniel Moser, Gertrud Konrad and Hartmut Abele</i></p>	
FAKT P04	<p><b>Left-right symmetry in neutron beta decay</b></p> <p><i>Michael Klopff, Gertrud Konrad, Wilfried Mach, Heiko Saul, Xiangzun Wang and Hartmut Abele</i></p>	
FAKT P05	<p><b>Investigation on Possibilities for Prompt Gamma Imaging</b></p> <p><i>Florian Pipper, Johann Zmeskal, Johann Marton, Andreas Pichler and Dominik Steinschaden</i></p>	
FAKT P06	<p><b>Determination of the Pion Sigma scattering lengths from the charmed Lambda to Sigma pi pi decay using Belle data</b></p> <p><i>Manfred Berger, Ken Suzuki, Christoph Schwanda, Thorne Felicitas and Robin Glattauer</i></p>	

## FAKT

*Freitag/Friday, 26.09.2014, 9-12:15, Festsaal Raika*

Zeit time	ID	<b>FAKT, Detectors and methods</b> Chair: NN
09:00	FAKT T51	<p><b>Design and setup of a high resolution X-ray detector system for the kaonic deuterium experiment at J-PARC</b></p> <p><i>Carolina Berucci, Michael Cargnelli, Johann Marton, Eberhard Widmann and Johann Zmeskal</i></p>

09:15	FAKT T52	<b>Extending Bayesian evaluation methods to differential angle cross sections and spectra</b> <i>Georg Schnabel and Helmut Leeb</i>
09:30	FAKT T53	<b>Magnetische Wanderwellenresonatoren für polarisierte Neutronenstrahlen</b> <i>Erwin Jericha, Stefan Baumgartner, Bernhard Berger, Peter Geltenbort, Christoph Gösselsberger, Masahiro Hino, Sebastian Nowak, Tatsuro Oda, Robert Raab and Gerald Badurek</i>
09:45	FAKT T54	<b>Laser photodetachment in a gas-filled RF-quadrupole for AMS</b> <i>Johanna Pitters, Oliver Forstner, Johannes Lachner, Johannes Lahner, Martin Martschini, Alfred Priller, Peter Steier and Robin Golser</i>
10:00	FAKT T55	<b>Status of MedAustron – the Austrian ion therapy and research center</b> <i>Alexander Wastl, Adriano Garonna, Claus Schmitzer, Alexander Koschik, Matthias Kronberger, Liviu Penescu, Christoph Kurfuerst and Tobias Kulenkampff</i>
10:15 10:44		Kaffeepause / Coffee break
Zeit time	ID	<b>FAKT, Particle theory &amp; QCD Chair: Reinhard Alkofer</b>
10:45	FAKTT 61	<b>Systematic studies of texture zeros in the lepton mass matrices</b> <i>Patrick Ludl and Walter Grimus</i>
11:00	FAKT T62	<b>The Role of the Quark-Gluon Vertex Function in the QCD Phase Transition</b> <i>Markus Hopfer, Andreas Windisch and Reinhard Alkofer</i>
11:15	FAKT T63	<b>Gluonic three-point correlations in pure Landau gauge QCD</b> <i>Adrian Lorenz Blum, Reinhard Alkofer, Gernot Eichmann, Markus Q. Huber, Mario Mitter, Lorenz von Smekal, Milan Vujanovic and Richard Williams</i>
11:30	FAKT T64	<b>Four-fermion condensation in strongly interacting dense matter</b> <i>Andreas Windisch, Kai Schwenzer and Mark Alford</i>
11:45	FAKT T65	<b>Measurement of quarkonium production cross sections at CMS</b> <i>Johannes Brandstetter, Ilse Krätschmer and Valentin Knünz</i>
12:00	FAKT T66	<b>Alpha-nucleus optical potentials for nuclear astrophysics</b> <i>Thomas Srdinko, Georg Schnabel, Doreen Melari Warjri and Helmut Leeb</i>
12:15		<b>Ende der Veranstaltung / End of session</b>

## AMP

Mittwoch/Wednesday, 24.09.2014, 14:30-16.30, Festsaal Sparkasse

Zeit time	ID	AMP Chair: Markus Kitzler
14:30	AMP T01	<b>High harmonics from a radio-frequency pre-excited medium</b> <i>Enikoe Seres, Jozsef Seres, Georg Winkler and Thorsten Schumm</i>
14:45	AMP T02	<b>Attosecond dynamics of parametric amplification at 11 nm</b> <i>Jozsef Seres, Enikoe Seres, Björn Landgraf, Boris Ecker, Bastian Aurand, Andreas Hoffmann, Georg Winkler, Shinichi Namba, Thomas Kühel and Christian Spielmann</i>
15:00	AMP T03	<b>Extreme ultraviolet light source based on intracavity high harmonic generation in a mode locked Ti:sapphire oscillator with 9.4 MHz repetition rate</b> <i>Enikoe Seres, Jozsef Seres and Christian Spielmann</i>
15:15	AMP T04	<b>Comparison of multi-photon and EUV single-photon probing using a novel time-resolved EUV spectrometer</b> <i>Markus Koch, Jakob Grilj, Emily Sistrunk, Thomas J. A. Wolf and Markus Gühr</i>
15:30	AMP T05	<b>Systematic investigation of the absorption spectrum of La atoms using laser excitation and optogalvanic detection</b> <i>Tobias Binder and Laurentius Windholz</i>
Zeit time	ID	AMP Chair: Markus Koch
15:45	AMP T06	<b>Attosecond spatial control of electron emission dynamics</b> <i>Li Zhang, Xinhua Xie, Stefan Roither, Daniil Kartashov, Yueming Zhou, Yanlan Wang, Chuanliang Wang, Markus Schöffler, Paul Corkum, Andrius Baltuska, Peixiang Lu, Igor Ivanov, Anatoli Kheifets, Xiaojun Liu, Andre Staudte and Markus Kitzler</i>
16:00	AMP T07	<b>Electronic pre-determination of ethylene fragmentation dynamics</b> <i>Xinhua Xie, Erik Lötstedt, Stefan Roither, Markus Schöffler, Sonia Erattupuzha, Daniil Kartashov, Gerhard Paulus, Atsushi Iwasaki, Andrius Baltuska, Kaoru Yamanouchi and Markus Kitzler</i>
16:15	AMP T08	<b>Attosecond strong-field electron wavepacket interferometry</b> <i>Xinhua Xie, Stefan Roither, Daniil Kartashov, Diego Arbó, Stefanie Gräfe, Andrius Baltuska, Joachim Burgdörfer and Markus Kitzler</i>
16:30		<b>Ende der Veranstaltung / End of session</b>
17:00 - 18:30		<b>Umtrunk und Ausstellungsbesuch ECHOPHYSICS</b>
19:00 - 20:00	A T01	<b>Öffentlicher Abendvortrag: Festsaal Schloss Pöllau</b> <b>Univ.-Prof. Dr. Friedrich Wagner</b> <i>Max-Planck-Institut für Plasmaphysik, Teilinstitut Greifswald</i> <b>Die Energiewende Deutschlands – wohin wird sie führen?</b>

## Öffentliche Abendvorträge, Festsaal Schloss Pöllau

Zeit time	ID	<b>Öffentlicher Abendvortrag</b> Mittwoch, 24.09.2014 <b>Chair: NN</b>
19:00 - 20:00	A T01	<b>Die Energiewende Deutschlands – wohin wird sie führen?</b> <i>Friedrich Wagner</i>
		<b>Öffentlicher Abendvortrag</b> Donnerstag, 25.09.2014 <b>Chair: NN</b>
19:30 - 20:30	A T02	<b>Quantenphysik und Information</b> <i>Anton Zeilinger</i>
		<b>Öffentlicher Abendvortrag</b> Freitag, 26.09.2014 <b>Chair: NN</b>
19:30 - 20:30	A T03	<b>Evolution gesehen durch die Brillen der Physiker und der Biologen</b> <i>Peter Schuster</i>

## Plenarsitzung / Plenary session

*Donnerstag/Thursday, 25.09.2014, 9-18, Festsaal Schloss Pöllau*

Zeit time	ID	<b>Plenarvortrag OGD</b> <b>Chair: Ulrike Diepold</b>
09:00	PLE T01	<b>The small frontier: Imaging molecular functionality</b> <i>Klaus Kern</i>
	ID	<b>Plenarvortrag FKP</b> <b>Chair: NN</b>
09:45	PLE T02	<b>Hunds-rule coupling and magnetism in technetium and chromium oxides</b> <i>Markus Aichhorn</i>
10:30 10:59		Kaffeepause / Coffee break

11:00 - 12:14		<b>Ehrungen</b> Fritz Kohlrausch-Preis Max Auwärter-Preis Victor Franz Hess-Preis Anton Paar-Preis Preise für Fachbereichsarbeiten Team Internationale Physikolympiade Team International Young Physicists' Tournament (IYPT)
	ID	<b>Plenarvortrag FAKT</b> Chair: NN
12:15	PLE T03	<b>The PANDA experiment at FAIR</b> <i>Paul Bühler</i>
13:00 14:29		<b>Mittagspause / Lunch break</b>
14:30 - 15:30		<b>ÖPG-Jahreshauptversammlung</b>
15:30 15:59		Kaffeepause / Coffee break
	ID	<b>Preisträgervortrag Fritz Kohlrausch-Preis</b> Chair: NN
16:00	PR T01	<b>Water' s second glass transition</b> <i>Katrin Amann-Winkel</i>
	ID	<b>Preisträgervortrag Max Auwärter-Preis</b> Chair: NN
16:30	PR T02	<b>From ultrathin perovskites to oxide quasicrystals</b> <i>Stefan Förster</i>
	ID	<b>Preisträgervortrag Victor Franz Hess-Preis</b> Chair: NN
17:00	PR T03	<b>Microwave spectroscopic study of the hyperfine structure of antiprotonic helium-3</b> <i>Susanne Friedreich</i>
17:30	PLE T04	<b>Projekt: „Coole Physik“</b> <i>Erich Gornik, Christian Fabjan, Walter Kutschera, Leo Ludick und Leopold Mathelitsch</i>
18:00 - 19:30		<b>Posterpräsentationen, Schloss Pöllau</b> COND, FAKT, Astro/ExoLife
19:30 - 20:30	A T02	<b>Öffentlicher Abendvortrag, Festsaal Schloss Pöllau</b> <b>Univ.-Prof. Dr. Anton Zeilinger</b> <i>Universität Wien &amp; Österreichische Akademie der Wissenschaften, Wien</i> <b>Quantenphysik und Information</b>

Zeit time	ID	<b>Physik und Schule Chair: NN</b>
14:00	LHS T01	<b>„Verborgene Schätze“: historische physikalische Geräte in Physik-Kabinetten</b> <i>Armin Denoth</i>
14:20	LHS T02	<b>Rundblick über physikalische Kulturgüter in Sammlungen an alten Höheren Schulen Österreichs</b> <i>Leopold Stadler</i>
14:40	LHS T03	<b>Projekt: „Coole Physik“</b> <i>Leopold Mathelitsch, Christian Fabjan, Erich Gornik, Walter Kutschera und Leo Ludick</i>
15:00	LHS 11	<b>Interferometrie von Materiewellen</b> <i>Julia Salapa</i> <i>Akademisches Gymnasium Wien (Betreuung: Dr. Erwin Kronberger)</i>
15:15	LHS 12	<b>Die Automatisierung einer Carrera-Rennbahn</b> <i>Michael Fellner</i> <i>BRG Wörgl (Betreuung: Mag. Christian Pronegg)</i>
15:30 15:59		Kaffeepause / Coffee break
16:00	LHS 13	<b>Von Lasern und Legierungen</b> <i>Philipp Haim</i> <i>BRG Wels (Betreuung: Mag. Petra Kragl)</i>
16:15	LHS 14	<b>Die Möglichkeiten des 3D-Drucks mit dem Verfahren des Fused Deposition Modeling anhand des RepRap Prusa Mendel I2</b> <i>Benjamin von Berg</i> <i>Keplergymnasium Graz (Betreuung: Dr. Leander Brandl)</i>
16:30	LHS T04	<b>From “The Big Bang Theory” to Young High-Potentials education in physics</b> <i>Johannes Leitner, Ruth-Sophie Taubner, Maria Firneis and Regina Hitzenberger</i>
16:50		<b>Physik-Olympiade</b>
17:05		<b>International Young Physicists´ Tournament</b>
17:20 - 17:50		<b>Geschäftssitzung des Fachbereichs (Neuwahl der Vorsitzenden)</b>

## CiP

*Donnerstag/Thursday, 25.09.2014, 16-17:20, Festsaal Raika*

Zeit time	ID	<b>CIP</b> <b>Chair: Doris Steinmüller-Nethl</b>
16:00	CIP T01	<b>Bachelor, Master oder Dissertation – und was nachher?</b> <i>Elisabeth Schwab and Josef Siess</i>
16:20	CIP T02	<b>Am Anfang war alles leicht</b> <i>Richard Zemann</i>
16:40	CIP T03	<b>Mut zur Selbstständigkeit – realistisch oder blauäugig?</b> <i>Doris Steinmüller-Nethl</i>
17:00	CIP T04	<b>On-boarding: Worauf neue Mitarbeiter im Unternehmen achten [soll(t)en]</b> <i>Josef Siess and Elisabeth Schwab</i>
17:20		<b>Ende der Veranstaltung / End of session</b>

## Astro/ExoLife Poster

*Donnerstag/Thursday, 25.09.2014, Schloss Pöllau, 18:00-19:30*

ID	<b>Astro/ExoLife Poster</b> <b>Chair: NN</b>
EXOL P01	<b>Including new Cassini's Gravity Measurements into Interior Structure Models of Enceladus</b> <i>Ruth-Sophie Taubner, Johannes Leitner, Maria Firneis and Regina Hitzberger</i>
EXOL P02	<b>Hotspots and the Heat Budget of Venus</b> <i>Elisabeth Fahrngruber, Johannes Leitner and Maria Firneis</i>
EXOL P03	<b>Possible Water Flow Interaction of Rivers, Lakes and Oceans on Mars</b> <i>Gabor-Imre Kiss, Johannes Leitner and Maria Firneis</i>
EXOL P04	<b>Estimating the Relative Age of Polygonal Impact Craters on Venus</b> <i>Gerhard Wehls, Johannes Leitner and Maria Firneis</i>

## Pöllauer Tage der Physikgeschichte

**„Und dennoch bewegen sie sich ...“ – Boltzmann-Tagung**

*Freitag/Friday, 26.09.2014, 9-17:30, Refektorium Schloss Pöllau*

Zeit time	ID	<b>Boltzmann-Tagung</b> <b>Chair: Peter Maria Schuster</b>
09:00	B T01	<b>Maxwell's Dämon: Seine Historie und Entzauberung im Wechselspiel von Thermodynamik und Informationswissenschaften</b> <i>Heinz Krenn</i>
09:45	B T02	<b>Irreversibilität: von der Boltzmann-Gleichung zu den Fluktuationstheoremen</b> <i>Christoph Dellago</i>
10:30 10:59		Kaffeepause / Coffee break
Zeit time	ID	<b>Boltzmann-Tagung</b> <b>Chair: Walter Kutschera</b>
11:00	B T03	<b>Josef Stefan, Revolutionär und Pionier der Atomistik der Materie – Wege zum Verständnis der Bewegung der Atome</b> <i>Gero Vogl</i>
11:45	B T04	<b>Die „Perle“ Stefan-Boltzmann-Gesetz</b> <i>Heinrich Mitter</i>
12:30 13:59		<b>Mittagspause / Lunch break</b>
Zeit time	ID	<b>Boltzmann-Tagung</b> <b>Chair: Heinz Krenn</b>
14:00	B T05	<b>Geschichte der Atomhypothese</b> <i>Sonja Draxler and Max E. Lippitsch</i>
14:45	B T06	<b>Entropie ohne Atome</b> <i>Jakob Yngvason</i>
15:30 15:59		Kaffeepause / Coffee break
Zeit time	ID	<b>Boltzmann-Tagung</b> <b>Chair: Jakob Yngvason</b>
16:00	B T07	<b>Das Sortieren von Atomen „One by One“ - Boltzmanns Vermächtnis in der Massenspektrometrie</b> <i>Walter Kutschera</i>
16:45	B T08	<b>Evolution der Kooperation</b> <i>Karl Sigmund</i>
17:30		<b>Ende der Veranstaltung / End of session</b>
18:00 19:15		<b>Umtrunk und Ausstellungsbesuch ECHOPHYSICS</b>
19:30 - 20:30	A T03	<b>Öffentlicher Abendvortrag: Festsaal Schloss Pöllau</b> <b>Univ.-Prof. Dr. Peter Schuster</b> <i>Institut für Theoretische Chemie, Universität Wien</i> <b>Evolution gesehen durch die Brillen der Physiker und der Biologen</b>



**GEP**

Samstag/Saturday, 27.09.2014, 9-13, Refektorium Schloss Pöllau

Zeit time	ID	<b>GEP</b> <b>Chair: Peter M. Schuster</b>
09:00	GEP T01	<b>Die ersten Galvanometer in der Zeit 1820 bis 1840</b> <i>Franz Sachslehner</i>
09:30	GEP T02	<b>Medizinische Physik – Physik im Dienste der Medizin. Der österreichische Medizinphysiker Dr. Fritz Hawliczek</b> <i>Werner Schmidt and Ferdinand Steger</i>
10:00	GEP T03	<b>Halbleiter-Dioden zur Detektion von Radarsignalen – Entwicklung in den USA und in Deutschland 1940- 1948</b> <i>Franz Pichler</i>
10:30 10:59		Kaffeepause / Coffee break
Zeit time	ID	<b>GEP</b> <b>Chair: Heinz Krenn</b>
11:00	GEP T04	<b>Meteorologische Forschung an der Universität Graz während des 2. Weltkriegs</b> <i>Bruno Besser</i>
11:30	GEP T05	<b>Peter Salcher – Other works carried out in Fiume (Rijeka)</b> <i>Ana Alebić-Juretić</i>
12:00	GEP T06	<b>Case study of solar eclipse occurred on 10th July 1600</b> <i>Mohammed Boudjada and Bruno Besser</i>
12:30	GEP T07	<b>Experimentally verified violation of the law of reflection directly disproves length-contraction</b> <i>Karl Mocnik</i>
13:00		<b>Ende der Veranstaltung / End of session</b>
13:15 – 14:15		<b>Ausstellungsbesuch ECHOPHYSICS</b>