
AKU – Acoustics

Tuesday, 11.09.

SESSION: AKU I

CHAIR: Christoph REICHL

16:00 - 16:20	AKU T1 Christoph Reichl "MicLocator - Determining multiple microphones' positions using sound wave delay and trilateration"	HS P3
16:20 - 16:40	AKU T2 Simon Hinterseer "Determining the Influence of the Operating Point on Noise Emissions of Air Source Heat Pumps"	HS P3
16:40 - 17:00	AKU T3 Christian Kaseß "Gaussian Closure für hysteretische Systeme unter weißem Rauschen!"	HS P3

AMP – Atoms, Molecules, Quantum Optics and Plasmas

Wednesday, 12.09.

SESSION: AMP I

CHAIR: Roland LAMMEGGER

	AMP T1	
16:00 - 16:20	Christoph Amtmann "A coupled dark state magnetometer developed for space mission"	HS P3
16:20 - 16:40	Laurin Ostermann "Super- and subradiance of a 1D chain of clock atoms trapped inside an optical fiber"	HS P3
	AMP T3	
16:40 - 17:00	Maxime Jacquet "The influence of spacetime curvature on quantum emission in optical analogues to gravity"	HS P3
	AMP T4	
17:00 - 17:20	Pascal Heim "Bayesian Analysis of Femtosecond Pump-Probe Photoelectron-Photoion Coincidence Measurements"	HS P3

Thursday, 13.09.

SESSION: AMP II

CHAIR: Florian LACKNER

	AMP T5	
14:00 - 14:20	Amit Nanda "Ramsey set-up for (anti-)hydrogen spectroscopy"	HS P3
	AMP T6	
14:20 - 14:40	Ralf Meyer "Neural network based embedded atom model potentials for metallic nanoparticles"	HS P3

	AMP T7	
14:40 - 14:55	Christian Brand "Atomic diffraction through a pristine sheet of single layer graphene"	HS P3
	AMP T8	
14:55 - 15:10	Christian Brand "Selecting molecular conformers by matter-wave diffraction"	HS P3

	AMP T9	
15:10 -15:30	Markus Koch "Non-Adiabatic Photofragmentation Dynamics of Acetone Molecules Studied by Femtosecond Photoelectron-Photoion Coincidence Spectroscopy"	HS P3

SESSION: AMP III

CHAIR: Markus KOCH

	AMP T10	
16:00 - 16:20	Bernhard Thaler "Ultrafast photoexcitation dynamics inside superfluid helium nanodroplets"	HS P3
	AMP T11	
16:20 - 16:40	Miriam Meyer "Coherent vibrational wave packet motion inside superfluid helium nanodroplets"	HS P3
	AMP T12	
16:40 - 17:00	Raphael Holzinger "Subradiance in V-type Multi Level Systems"	HS P3
	AMP T13	
17:00 - 17:20	Roman Messner "Spectroscopy of gold atoms in helium nanodroplets"	HS P3

COND – Condensed Matter

Tuesday, 11.09.

SESSION: COND I

CHAIR: Markus AICHHORN

14:00 - 14:15	COND T1 Nikola Opacak "QWIPs and QCDs for RF"	HS P2
14:15 - 14:30	COND T2 Aaron Maxwell Andrews "Quantum Cascade Laser and Detector Material Systems"	HS P2
14:30 - 14:45	COND T3 Borislav Hinkov "Surface emitting ring interband cascade lasers"	HS P2
14:45 - 15:00	COND T4 Thomas Hahn "Diagrammatic Monte Carlo study of Fröhlich polaron dispersion in two and three dimensions"	HS P2
15:00 - 15:15	COND T5 Gilles Bourret "Three Dimensional Nanostructuring of Silicon"	HS P2
15:15 - 15:30	COND T6 Maximilian Beiser "Mode-locked interband cascade lasers"	HS P2

SESSION: COND II

CHAIR: Markus KRATZER

16:00 - 16:15	COND T7 Eva-Maria Steyskal "In-Situ Studies on the Formation and Tunable Properties of Nanoporous Metals Produced by Electrochemical Dealloying"	HS P2
16:15 - 16:30	COND T8 Christian Rentenberger "Characterisation of CuZr-based bulk metallic glasses after structural rejuvenation by severe plastic deformation"	HS P2
16:30 - 16:45	COND T9 Elisabeth Hengge "Quantitative analysis of the precipitation kinetics in dilute alloys by isothermal in-situ high-precision dilatometry"	HS P2
16:45 - 17:00	COND T10 Markus Gößler "Electrochemical Tuning of Magnetism in Nanoporous Systems-Oxydation, Hydrogenation and Surface Charging"	HS P2

17:00 - 17:15	COND T11 Caterina Czibula "Viscoelastic properties of pulp fibers investigated by atomic force microscopy"	HS P2
17:15 - 17:30	COND T12 Natalia Bedoya-Martinez "Towards a reliable description of lattice vibrations in organic molecular crystals: Effect of van der Waals interactions"	HS P2

Wednesday, 12.09.

SESSION: COND III

CHAIR: Peter PUSCHNIG

14:00 - 14:15	COND T13 Max Sorantin "Impact ionization processes in the steady state of a driven Mott insulating layer coupled to metallic leads"	HS P2
14:15 - 14:30	COND T14 Mathias Schwendt "Discrete Transparent Boundary Conditions for the Schrödinger Equation in (1+1)D"	HS P2
14:30 - 14:45	COND T15 Maximilian Schober "Spin- and Valley Polarized Electron Layers"	HS P2
14:45 - 15:00	COND T16 Michaela Haslhofer "Collective Modes in Graphene on a Bulk Substrate"	HS P2
15:00 - 15:15	COND T17 Michel Bockstedte "Ab initio description of highly correlated states in defects for realizing quantum bits"	HS P2
15:15 - 15:30	COND T18 Markus Aichhorn "Mott physics and transport properties in multi-orbital systems: The example of manganese pnictides"	HS P2

SESSION: COND IV & NESY

CHAIR: Roland RESEL

16:00 - 16:15	NESY T1 Richard Haider "On Laser Ablation and Injection Moulding as Techniques for the Production of Small Angle X-Ray Scattering Compatible Micro Channels"	HS P2
----------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------

16:15 - 16:30	NESY T2 Rainer Lechner "Revealing the Core/Shell Structure of CdSe/CdS Nanocrystals by synchrotron based SAXS/WAXS studies"	HS P2
16:30 - 16:45	NESY T3 Lukas Ludescher "Apparent lattice deformation of ordered mesoporous silica during in-situ sorption small angle scattering measurements"	HS P2
16:45 - 17:00	COND T19 Andrea Navarro Quezada "Magnetoresistance of phase separated (Ga,Fe)N containing Ga _y Fe _{4-y} N embedded nanocrystals"	HS P2
17:00 - 17:15	COND T20 Maurizio Musso "Characterization of Tannin-Furanic Foams by Raman Spectroscopy, Infrared Spectroscopy, and by X-ray Computed Microtomography"	HS P2
17:15 - 17:30	COND T21 Benedetta Marmiroli "X-ray study of the Hydration of Lipid Membranes upon Interaction with a Mesoporous Support prepared by Deep X-Ray Lithography Technique"	HS P2

ELI – Extreme Light Infrastructure

Wednesday, 12.09.

SESSION: ELI I

CHAIR: Zsolt FULOP

14:00 - 14:30	ELI T1 Dimitris Charalambidis "ELI: Scientific opportunities, perspectives and challenges"	SR IF
14:30 - 14:50	ELI T2 Karoly Osvay "Few-cycle laser based research technologies for users at ELI Attosecond Light Pulse Source"	SR IF
14:50 - 15:10	ELI T3 Markus Kitzler "Attosecond measurement and control of electron and nuclear dynamics in molecules"	SR IF
15:10 - 15:30	ELI T4 Joachim Krenn "Probing Nanoplasmonic Field Enhancement with Ultrafast Photoemission"	SR IF

SESSION: ELI II

CHAIR: Zsolt FULOP

16:00 - 16:30	ELI T5 Sergei Bulanov, Georg Korn "Extreme Light Infrastructure (ELI): Science and Technology at the ultra-intense Frontier"	SR IF
16:30 - 16:50	ELI T6 Kazuo Tanaka "Where does ELI-NP stand now?"	SR IF
16:50 - 17:10	ELI T7 Ronald Meisels "Simulation of EUV mirrors towards all-angle reflection"	SR IF

FAKT – Nuclear and Particle Physics

Wednesday, 12.09.

SESSION: FAKT I

CHAIR: Reinhard ALKOFER

14:00 - 14:25	FAKT T1 Alexander Burker "Imaging with ion beams at MedAustron"	SR TDK
14:25 - 14:50	FAKT T2 Martin Stahlberg "Direct Search for Dark Matter with the CRESST III Experiment"	SR TDK
14:50 - 15:15	FAKT T3 Thomas Madlener "Recent Measurements of P-wave quarkonia at CMS"	SR TDK
15:15 - 15:30	FAKT T4 Stephan Sponar "Weak Values and Weak Measurements studied in Neutron Interferometry"	SR TDK

SESSION: FAKT II

CHAIR: Reinhard ALKOFER

16:00 - 16:15	FAKT T5 Alicia Wongel "SModelS: An LHC New Physics Tool - Update to signatures beyond missing energy"	SR TDK
16:15 - 16:30	FAKT T6 Victor Franz Hess Award Winner Erica Brondolin "Track reconstruction in the CMS experiment for the High Luminosity LHC"	SR TDK
16:30 - 16:45	FAKT T7 Manfred Valentan "The CMS High Granularity Calorimeter for the High Luminosity LHC"	SR TDK
16:45 - 17:00	FAKT T8 Dominic Blöch "The CMS Outer Tracker system for the High Luminosity LHC"	SR TDK

17:00 - 17:15	FAKT T9 Carina Trippi "A New High-precision Silicon Drift Detector System for Kaonic Atom Measurements at J-PARC and DAFNE"	SR TDK
17:15 - 17:30	FAKT T 10 Marlene Tüchler "A charged particle veto detector for kaonic deuterium measurements at DAFNE"	SR TDK

Thursday, 13.09.

SESSION: FAKT III

CHAIR: Reinhard ALKOFER

14:00 - 14:25	FAKT T11 Walter Pötz "Lattice Fermions without Doubling"	SR TDK
14:25 - 14:50	FAKT T12 Markus Huber "Recent developments in the calculation of correlation functions of Yang-Mills theory"	SR TDK
14:50 - 15:15	FAKT T13 Helios Sanchis Alepuz "Status of Hadron Structure Calculations in Continuum QCD"	SR TDK
15:15 - 15:30	FAKT T14 Jordi Paris-López "On the dynamic generation of kinetic terms for mesonic bound states"	SR TDK

SESSION: FAKT IV

CHAIR: Reinhard ALKOFER

16:00 - 16:15	FAKT T15 Sebastian Raubitzek "The size of the W-boson"	SR TDK
16:15 - 16:30	FAKT T16 Madeleine Adrien "Mesonic bound states in a nearly-conformal gauge theory"	SR TDK
16:30 - 16:45	FAKT T17 Wolfgang Kern "On the spectral dimensions seen by gluons"	SR TDK

16:45 - 17:00	FAKT T18 Romain Contant "On the quark-gluon vertex at nonvanishing temperature"	SR TDK
17:00 - 17:10	FAKT T19 Angel Salvador Miramontes Lopez "Pionic corrections to the mesons' quark core"	SR TDK
17:10 - 17:20	FAKT T20 Bernhard Stöllinger "On chiral perturbation theory for composite states"	SR TDK
17:20 - 17:35	FAKT T21 Florian Attenededer "The charged rotating mass shell and its gyromagnetic ratio in general relativity and modified gravity theories"	SR TDK

GEP – History of Physics

Tuesday, 11.09.

SESSION: GEP I

CHAIR: Heinz KRENN

14:00 - 14:40	GEP T1 Walter Kutschera "The life and science of Marie Curie and Lise Meitner - two icons of radioactivity"	SR TDK
14:40 - 15:00	GEP T2 Franz Sachslehner "Double refraction on artful historical crystal slides and glasses with inner stresses"	SR TDK
15:00 - 15:20	GEP T3 Armin Denoth "From the Armarium to the Institute of Experimental Physics. The 275-year anniversary: 1743-2018"	SR TDK

SESSION: GEP II

CHAIR: Walter KUTSCHERA

16:00 - 16:40	GEP T4 Heinz Krenn "Maxwell's Demon: A Historical Puzzle with Impact on Modern Physics"	SR TDK
16:40 - 17:00	GEP T5 Bruno Besser "Early Styrian Meteorological Records Revisited"	SR TDK
17:00 - 17:20	GEP T6 Karl Mocnik "Experimental Proof of Aetherdrift Disproves Hypothesis of Length-Contraction"	SR TDK

LHS – Physics and School

Wednesday, 12.09.

SESSION: LHS & YM		
CHAIR: Alexander STRAHL		
14:00 - 14:20	LHS T1 Markus Huber "QUANT - Bringing current research to highschool physics education"	HS P1
14:20 - 14:40	LHS T2 Alexander Pfleger "The international physics students competition PLANCKS - Physics League Across Numerous Countries for Kick-Ass Students"	HS P1
14:40 - 15:30	<u>See Announcement!</u>	HS P1

SESSION: LHS & YM

CHAIR: Alexander STRAHL

16:00 - 17:30	<u>See Announcement!</u>	HS P1
----------------------	---------------------------------	--------------

MBU - Medical Physics, Biophysics and Environmental Physics

Thursday, 13.09.

SESSION: MBU

CHAIR: Georg PAPST

14:00 - 14:15	MBU T1 Lisa Marx "X-ray Studies of Antimicrobial Peptide Activity in E. coli Inner and Outer Membrane Mimics"	HS P2
14:15 - 14:30	MBU T2 Enrico Semeraro "Time-Resolved X-ray Studies of Antimicrobial Peptide Activity in Live E. coli on the Nano- to Micrometer Scales"	HS P2
14:30 - 14:45	MBU T3 Michael Mayrhofer-Reinhartshuber "IKOSA: Online Platform for Automated Image Analysis based on Artificial Intelligence"	HS P2
14:45 - 15:00	MBU T4 Franziska Strasser "Calibration free measurement of optical force and torque of trapped particles"	HS P2
15:00 - 15:15	MBU T5 Joao Ameixa "Low-energy electron-induced decomposition of 5-trifluoromethanesulfonyl-uracil: a high-potential radiosensitizer"	HS P2
15:15 - 15:30	MBU T6 Marcell Wolf "The effect of pressure on a liquid-liquid phase separated protein system induced by multivalent ions"	HS P2

NESY - Research with Neutron and Synchrotron Radiation

Wednesday, 12.09.

SESSION: COND IV & NESY

CHAIR: Roland RESEL

16:00 - 16:15	NESY T1 Richard Haider "On Laser Ablation and Injection Moulding as Techniques for the Production of Small Angle X-Ray Scattering Compatible Micro Channels"	HS P2
16:15 - 16:30	NESY T2 Rainer Lechner "Revealing the Core/Shell Structure of CdSe/CdS Nanocrystals by synchrotron based SAXS/WAXS studies"	HS P2
16:30 - 16:45	NESY T3 Lukas Ludescher "Apparent lattice deformation of ordered mesoporous silica during in-situ sorption small angle scattering measurements"	HS P2

OGD - Surfaces, Interfaces and Thin Layers

Tuesday, 11.09.

SESSION: OGD I

CHAIR: Egbert ZOJER

14:00 - 14:30	OGD T1 Christian Papp "Surface Chemistry of 2D Materials"	HS BMT
14:30 - 14:45	OGD T2 Margareta Wagner " $\text{In}_2\text{O}_3(111)$ -Surface Structure and Adsorption"	HS BMT
14:45 - 15:00	OGD T3 Adrian Ruckhofer "Surface phonon dispersion of $\text{Bi}_2\text{Se}_3(111)$: Surface Acoustic Waves and Charge Density Wave"	HS BMT
15:00 - 15:15	OGD T4 Julian Pilz "Influence of Substrate Temperature on Structural, Optical, and Electrical Properties of ZnO Deposited by Plasma-Enhanced Atomic Layer Deposititon"	HS BMT
15:15 - 15:30	OGD T5 Alberto Perrotta "Initial ZnO Crystallite Formation by Plasma Enhanced Atomic Layer Deposition"	HS BMT

SESSION: OGD II

CHAIR: Michael RAMSEY

16:00 - 16:15	OGD T6 Zhiyu Zou "Transition Metal Clusters on Zirconia (ZrO_2) Thin Films: Growth and Metal-Oxide Interactions"	HS BMT
16:15 - 16:30	OGD T7 Jasmin Abdou "Wet chemical preparation of $\text{CeO}_2(111)$ supported Au catalyst"	HS BMT
16:30 - 16:45	OGD T8 Martin Schnedlitz "To be or not to be alloyed: The unexpected behaviour of Ni-Au and Co-Au core-shell nanoparticles upon heating"	HS BMT
16:45 - 17:00	OGD T9 Maximilian Lasserus "Thermally induced alloying process in core@shell AgAu particles: A new method to measure diffusion on the nanoscale"	HS BMT

17:00 - 17:15	OGD T10 Florian Lackner "Helium Nanodroplet Based Synthesis of Tailored Nanoparticles for Surface Enhanced Raman Spectroscopy"	HS BMT
17:15 - 17:30	OGD T11 Alexander Schiffmann "Plasmon spectroscopy of metallic nanoparticles on ultra-thin h-BN films"	HS BMT

Wednesday, 12.09.

SESSION: OGD III

CHAIR: Christian PAPP

14:00 - 14:30	OGD T12 Michael Ramsey "Dielectric interlayers: Promoters of charge transfer or inert decoupling layers or both"	HS BMT
14:30 - 14:45	OGD T13 Bernd Kollmann "Photoemission Tomography of NiTPP on Cu(100)"	HS BMT
14:45 - 15:00	OGD T14 Alexander Egger "Ab-initio Structure Prediction of TCNE on Cu(111): From Monolayers towards Thin Films"	HS BMT
15:00 - 15:15	OGD T15 Michael Hollerer "Crystalline growth of flexible organic molecules: 6P on Ag(001)"	HS BMT
15:15 - 15:30	OGD T16 Lukas Hörmann "Taming the Configurational Explosion: Coarse Grained Modeling and Statistical Learning for Surface Structure Search"	HS BMT

SESSION: OGD IV

CHAIR: Margareta WAGNER

16:00 - 16:30	OGD T17 Oliver Diwald "Porphyrin Adsorption at Metal Oxide Nanoparticle Surfaces and Solid-Liquid Interfaces"	HS BMT
----------------------	---------------------------------------------------------------------------------------------------------------------------------------	---------------

16:30 - 16:45	OGD T18 Larissa Egger "Metalation of Organic Molecules: Tetraphenylporphyrin on thin films MgO(001)/Ag(001)"	HS BMT
16:45 - 17:00	OGD T19 Michel Bockstedte "Electronic states of porphyrins at surfaces: the signature of supramolecular network formation"	HS BMT
17:00 - 17:15	OGD T20 Aleksandar Matkovic "Interfacial band engineering of MoS ₂ /gold interfaces using pyrimidine containing self-assembled monolayers"	HS BMT
17:15 - 17:30	OGD T21 Markus Kratzer "Controlling initial stages of organic thin film growth by the step width of ion beam modified TiO ₂ (110)"	HS BMT

Thursday, 13.09.

SESSION: OGD V

CHAIR: Christian TEICHERT

14:00 - 14:15	OGD T22 Grant Simpson "Rotation and Translation of a Single Molecular Dipole"	HS BMT
14:15 - 14:30	OGD T23 Anton Tamtögl "Corroborating diffusion mechanisms between cryogenic and ambient temperatures"	HS BMT
14:30 - 14:45	OGD T24 Donato Civita "Selective dissociation of intramolecular bonds by STM manipulation"	HS BMT
14:45 - 15:00	OGD T25 Michael Györök "Aggregation of Metallophilic Molecules on Surfaces"	HS BMT
15:00 - 15:15	OGD T26 Christophe Nacci "Reversible Switching of Azobenzene Tetramers Molecules on a Metal Surface"	HS BMT
15:15 - 15:30	OGD T27 Vitalii Stetsovych "Resonant excitation of helicene single molecules by radio-frequency scanning tunneling microscopy"	HS BMT

SESSION: OGD VI

CHAIR: Christophe NACCI

16:00 - 16:30	OGD T28 Markus Valtiner "Molecularly confined aqueous ionic liquid solutions"	HS BMT
16:30 - 16:45	OGD T29 Fabian Muralter "Tunable Swelling Behavior of Hydrogel Thin Films deposited by initiated Chemical Vapor Deposition"	HS BMT
16:45 - 17:00	OGD T30 Oliver Werzer "Finding new drug polymorphs within thin films"	HS BMT
17:00 - 17:15	OGD T31 Roland Resel "Crystallisation of dioctyloxy-benzthiophene within thin films: a layer-by-layer growth mode"	HS BMT
17:15 - 17:30	OGD T32 Georgii Krikun "Influence of thermal transport parameters on operation temperature of OLEDs"	HS BMT

PIN - Physics-Industry

Wednesday, 12.09.

SESSION: PIN			
CHAIR: Peter KORCZAK			
14:00 - 14:20	PIN T1 Josef Sacher "Karriere als Physiker in der Industrie"		HS P3
14:20 - 14:40	PIN T2 Hemma Bieser "Future Career Prospects for Physicists"		HS P3
14:40 - 15:00	PIN T3 Mario Mueller "Physics as foundation for innovations in industry"		HS P3
15:00 - 15:20	PIN T4 Robert Hauser "Study, Research, Teaching and Management, over a period of 35 years"		HS P3