

OePG-CMD-JOINTMEETING 2026

75th Annual Meeting of the Austrian Physical Society

and

32nd Meeting of the Condensed Matter Division
of the European Physical Society

20 - 25 September 2026

University of Graz, Graz Center of Physics, Graz, Austria

Preliminary Program – CMD section



Plenary Talks

- Plenary 1: **Heike Riel**, IBM Research Zürich, Switzerland
tba
- Plenary 2: **Jairo Sinova**, Johannes Gutenberg Universität Mainz, Germany
Unconventional Magnetism: The Emergence of Altermagnetism and Beyond
- Plenary 3: **Reinhard Maurer**, University of Vienna, Austria
Deus ex Machina: Augmenting First Principles Theory with Machine Learning Methods
- Plenary 4: **Lyderic Bocquet**, CNRS and Ecole Normale Supérieure, Paris, France
The Molecular Mechanics of Fluids
- Plenary 5: **Rupert Huber**, University of Regensburg, Germany
Subcycle Videography of Electronic Quantum Motion
- Plenary 6: **Anna Maria Coclite**, University of Bari, Italy
Piezoelectric Thin Films Deposited from the Vapor Phase for Smart Sensors and Beyond
- Plenary 7: **Michael Pepper**, University College London, UK
Electronic Conduction in 1D – The 0.7 and Fractions in the 1D-2D Transition
- Plenary 8: **John Seddon**, Imperial College London, UK
Inverse Bicontinuous and Discontinuous Lyotropic Liquid Crystal Phases of Lipids: From Bulk Phases, to Lipid Nanoparticles
- Plenary 9: **Emanuel Gull**, University of Warsaw, Poland
Let's Get Real - Adapting the Toolkit of Many-Body Theory to Realistic Material Simulation
- Plenary 10: **Alexander Shapiro**, University of Graz, Austria
Understanding Stellar Magnetic Activity Through Solar Physics
- Plenary 11: **Edda Gschwendtner**, CERN, Switzerland
Next-Generation Particle Accelerators: Overview and Outlook
- Plenary 12: **Harald Reichert**, DESY, Hamburg, Germany
tba
- Plenary 13: **David Degerman**, Stockholm University, Sweden
Towards Realistic Pressures in X-ray Photoelectron Spectroscopy Applied to Heterogenous Catalysis - And What That Has Taught Us So Far
- Plenary 14: **tba**
tba

Semi-Plenary Talks

Semi-Plenary 1: **Yves Geerts**, Free University of Brussels, Belgium

Spin-Directed Chiral Symmetry Breaking

Semi-Plenary 2: **Pawel Kowalczyk**, University of Lodz, Poland

Peculiar Phenomena of 2D World from Surface Science Perspective

Semi-Plenary 3: **Ana Akrap**, University of Zagreb, Croatia

Magnetically Controlled Optical Effects in Eu-Based Conductors

Semi-Plenary 4: **Harald Giessen**, University of Stuttgart, Germany

3D Printed Micro-Optics: Fundamentals and First Hallmark Applications

Semi-Plenary 5: **Dominik Juraschek**, Eindhoven University of Technology, The Netherlands

Chiral Phononics: A New Approach to Angular Momentum in Solids

Semi-Plenary 6: **Stefan Rotter**, TU Wien, Austria

Fisher Information in Electromagnetism

CMD Mini-Colloquia

- M01 - Electron Correlations and Phonons in Quantum Materials
- M02 - Heavy Quasiparticles in Heavy Fermion Compounds
- M03 - Correlated Materials Out of Equilibrium
- M04 - Non-Crystalline Quantum Matter
- M05 - Transport in Low-Dimensional Strongly Correlated Quantum Systems
- M06 - Interaction Effects in Correlated Systems with Higher-Order Van Hove Singularities and Flat Bands
- M07 - Nickelate Superconductors: A New Platform for Unconventional Cooper-Pairing
- M08 - Superconducting Altermagnets - Fundamentals and Devices
- M09 - Magnetism and Superconductivity in Nanoscale 3D Architectures
- M10 - Mesoscopic Superconductivity and Quantum Circuits
- M11 - Electron-Phonon Coupling in Correlated Quantum Matter
- M12 - Recent Developments of the Polaron Theory
- M13 - Localization Dynamics in Matter and Waves
- M14 - Experimental Studies of Negatively Charged Ions
- M15 - Light-Wave Driven Dynamics in Quantum Materials
- M16 - Advances in Ultrafast Time-Resolved Ellipsometry
- M17 - Emerging Trends in Dielectric Nanophotonics
- M18 - Light-Driven Processes at Interfaces
- M19 - Time-Resolved Photoemission Orbital Tomography
- M20 - The New Frontiers of Angle-Resolved Photoemission Spectroscopy: Spin, Time and Spatial Resolution
- M21 - Recent Developments in Machine Learned Interatomic Potentials
- M22 - Compressing Complexity: Machine Learning in Hard and Soft Condensed Matter Physics
- M23 - Ab initio Modeling and Machine Learning of Crystal Defects
- M24 - Computational Frontiers in Structure Prediction, Lattice Dynamics, and Electron-Phonon Coupling
- M25 - Magnetism Research in the Central Europe Region
- M26 - 2D Material Research in the Central Europe Region
- M27 - 2D Materials-Synthesis, Surfaces, Dynamics, Devices
- M28 - Ultrafast and Topological Mechanisms of Ferroic Switching
- M29 - Nanomechanical, Electromechanical, Optomechanical and Levitated Systems
- M30 - Focused Beam Technologies for Functional Nanodevices
- M31 - Metal and Metal Oxide Particles for Catalysis and Sensorics
- M32 - Physical Vapor Deposition of Nitride Thin Films
- M33 - Particle Beams for Material Modification and Analysis
- M34 - Soft Meets Hard – Interfaces and Interactions
- M35 - Lipids, Surfactants and Polyelectrolytes
- M36 - Physics of Cellulose Based Materials
- M37 - Emergent Behavior in Soft and Living Matter
- M38 - Astronomy and Astrophysics Across Austria
- M39 - Next Generation Gravitational Wave Observations
- M40 - Phenomenology and Novel Observables at Future Colliders
- M41 - Hybrid Intelligence for the Quantum Era
- M42 - Advances in Magnonics

	Monday (09/21)	Tuesday (09/22)	Wednesday (09/23)	Thursday (09/24)	Friday (09/25)
	MORNING	MORNING	MORNING	MORNING	MORNING
08:30-09:00	Opening				
09:00-10:00	Plenary 1	Plenary 4	Plenary 7	Plenary 10	Plenary 13
	Riel	Bocquet	Pepper	Shapiro	Degerman
09:00-10:00	Plenary 2	Plenary 5	Plenary 8	Plenary 11	Plenary 14
	Sinova	Huber	Seddon	Gschwendtner	tba
10:00-10:30	Coffee break	Coffee break	Coffee break	Coffee break	Coffee break
10:30-12:30	Mini-Colloquia	Mini-Colloquia	Mini-Colloquia	Mini-Colloquia	Mini-Colloquia
	M03/1	M06/1	M01	M05/4	M05/3
	M04/1	M09	M05/1	M06/3	M13/3
	M10/1	M10/3	M06/2	M13/1	M15/2
	M11	M16	M12/3	M18/1	M29/5
	M12/1	M17/1	M21/1	M21/3	M33/3
	M14	M19	M25	M26/2	M36
	M23/1	M23/2	M27/1	M27/3	M37/1
	M28/1	M28/2	M30	M31/1	M41
	M32	M29/1	M37/2	M37/3	M42/3
	M39/1			M38/1	
				M42/1	
12:30-13:30	Break	Break	Break	Break	Closing Remarks
13:30-14:30	Posters (PS1)	Posters (PS1)	Posters (PS2)	Posters (PS2)	
	AFTERNOON	AFTERNOON	AFTERNOON	AFTERNOON	
14:30-15:30	Plenary 3	Plenary 6	Plenary 9	Plenary 12	
	Maurer	Coclite	Gull	Reichert	
14:30-15:00	Semi-Plenary 1	Europhysics Prize	Semi-Plenary 3	Semi-Plenary 5	
	Geerts		Akrap	Juraschek	
15:00-15:30	Semi-Plenary 2		Semi-Plenary 4	Semi-Plenary 6	
	Kowalczyk		Giessen	Rotter	
15:30-16:00	Coffee break	Coffee break	Coffee break	Coffee break	
16:00-18:00	Mini-Colloquia	Mini-Colloquia	Mini-Colloquia	Mini-Colloquia	
	M03/2	M02/1	M02/2	M02/3	
	M04/2	M07/2	M05/2	M05/5	
	M07/1	M08	M07/3	M13/2	
	M10/2	M10/4	M12/4	M15/1	
	M12/2	M17/2	M21/2	M18/2	
	M20/1	M20/2	M26/1	M24	
	M22/1	M22/2	M27/2	M29/4	
	M35	M29/2	M29/3	M31/2	
	M39/2	M34/2	M33/1	M33/2	
			M34/1	M38/2	
			M40	M42/2	
Registration and Reception 16:00-20:00		Public Talk 18:30-19:30	Conference Dinner 19:00-22:00		

Poster Session PS1: M02 M03 M08 M09 M10 M11 M12 M19 M20 M23 M35

Poster Session PS2: M01 M05 M18 M24 M27 M29 M30 M33 M37 M42

M01 - Electron Correlations and Phonons in Quantum Materials: A Theoretical and Computational Perspective

M01 – Session 1 (Wed 23, 10:30-12:30)			
ID	Title	Speaker	Type
55	Shannon entropy and decoherence of polaron in metal halide perovskite pseudopotential quantum dot.	Alain Jerve Fotue	Invited talk (30 min.)
736	Comprehensive fluctuating field theory study of magnetic instabilities in the doped Hubbard model.	Erik Linnér	Invited talk (30 min.)
251	Self-consistent two-particle calculations with quantics tensor trains -- solving the parquet equations.	Anna Kauch	Contributed talk (15 min.)
413	Integrating non-Abelian structure in usual Euclidean lattices: Cayley Schreier lattices.	Lavi Kumar Upreti	Contributed talk (15 min.)
452	DMFT calculations of electronic Raman scattering in layered ruthenates and rhodates.	Jernej Mravlje	Contributed talk (15 min.)
543	BaFe ₂ Se ₃ : a quasi-unidimensional non-centrosymmetric superconductor.	Shiyu Deng	Contributed talk (15 min.)

M01 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
494 P041	Optical and acoustic polaron formation: Dynamic matrix approach (DMA)	Martin Tchoffo	Poster

M02 - Heavy Quasiparticles in Heavy Fermion Compounds

M02 – Session 1 (Tue 22, 16:00-18:00, Chair: Gertrud Zwicknagl)			
ID	Title	Speaker	Type
291	Exploring Spin-Triplet Superconductivity in UTe_2 in Extreme Conditions	Daniel Braithwaite	Invited talk (30 min.)
749	Correlation induced quantum spin Hall insulating state in monolayer TaIrTe_4	Honey Boban	Contributed talk (15 min.)
662	Heterogeneous Ta-dichalcogenide bilayer: heavy fermions or doped Mott physics?	Lorenzo Crippa	Contributed talk (15 min.)
225	Change in charge density wave order beyond the Lifshitz transition in $2\text{H-Ta}_{1-x}\text{S}_2$	Mihir Date	Contributed talk (15 min.)
652	Influence of higher-order Van Hove singularities on superconductivity-induced Kondo destruction	Grzegorz Michalek	Contributed talk (15 min.)
792	Fermi surfaces and electronic structure of uranium-based superconductors	Alix McCollam	Invited talk (30 min.)

M02 – Session 2 (Wed 23, 16:00-18:00, Chair: Markus Aichhorn)			
ID	Title	Speaker	Type
77	Anisotropic spin Hamiltonians and low-temperature magnetic phases in rare-earth triangular-lattice compounds.	Leonid Pourovskii	Invited talk (30 min.)
734	Quantum Fisher information in a strange metal.	Federico Mazza	Contributed talk (15 min.)
700	Topological semimetal in a quantum critical heavy fermion system.	Diana M. Kirschbaum	Contributed talk (15 min.)
93	Intertwining bulk and surface: The case of UTe_2 .	Aline Ramires	Invited talk (30 min.)
782	Thermodynamic Probes of Hidden Superconducting Phase Boundaries in UTe_2	Michal Vališka	Invited talk (30 min.)

M02 – Session 3 (Thu 24, 16:00-18:00, Chair: Carolina A. Marques)			
ID	Title	Speaker	Type
780	STM Measurements of Topology and Gap Symmetry of the Heavy Fermion Superconductor UTe_2	Vidya Madhavan	Invited talk (30 min.)
694	Determining the superconducting order parameter of UPt_3 using scanning tunneling microscopy	Peter Wahl	Contributed talk (15 min.)
615	Imaging tuning of electronic structure with chemical pressure in $\text{Sr}_{2-x}\text{Ba}_x\text{RuO}_4$	Siri A. Berge	Contributed talk (15 min.)
725	Intertwined Electronic Phases in the Type-II Weyl Semimetal WTe_2	Alexander LaFleur	Contributed talk (15 min.)
675	High-Resolution QPI Study of Electronic States in Bulk WTe_2	Rian Ligthart	Contributed talk (15 min.)
462	Theory of superconducting pairing and topological surface states in UTe_2	Brian Moller Andersen	Invited talk (30 min.)

M02 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
790 P001	Superconducting density of states and vortex lattice of LaRu_2P_2 and superconducting gap of SrBi_2Se_4	Paula Obladen Agilera	Poster

M03 - Correlated Materials Out of Equilibrium

M03 – Session 1 (Mon 21, 10:30-12:30, Chair: Martin Eckstein)			
ID	Title	Speaker	Type
62	Electron Correlation Effects on the Electronic Structure and Spin Transport Properties of Spintronic Devices Beyond Linear Response	Andrea Droghetti	Contributed talk (15 min.)
57	Quantum interference in high harmonic generation from monolayer WS ₂	Anna Galler	Contributed talk (15 min.)
578	Dynamics of electronic excitations in 1T-TaS ₂	Uwe Bovensiepen	Invited talk (30 min.)
164	Mixed-configuration approximation for multiorbital systems out of equilibrium	Tommaso Maria Mazzocchi	Contributed talk (15 min.)
187	Nonequilibrium enhancement of coherence in phase-fluctuating systems	Duilio De Santis	Contributed talk (15 min.)
744	Breaking symmetries of crystals using nonlinear phononics	Alaska Subedi	Contributed talk (15 min.)

M03 – Session 2 (Mon 21, 16:00-18:00, Chair: Denis Golez)			
ID	Title	Speaker	Type
188	Out-of-equilibrium intertwining via emergent pseudo-Goldstone mode	Andras Szabo	Contributed talk (15 min.)
36	Towards a microscopic understanding of light-induced superconductivity in K ₃ C ₆₀	Michael Sentef	Invited talk (30 min.)
430	Role of pulse duration and chirality in high harmonic generation from a chiral Weyl semimetal	Alba de las Heras	Contributed talk (15 min.)
491	Room-temperature memristive switching between charge density wave states	Rok Venturini	Contributed talk (15 min.)

M03 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
213 P002	Altermagnetic systems out of equilibrium	Sebastian Alois Fuchs	Poster
322 P003	Nonequilibrium steady-states in Driven Mott Insulators: From Kondo Physics to Multiorbital correlations	Enrico Arrigoni	Poster
330 P004	Extension of the iterated perturbation theory for arbitrary fillings to nonequilibrium steady states	Tommaso Maria Mazzocchi	Poster

M04 - Non-Crystalline Quantum Matter

M04 – Session 1 (Mon 21, 10:30-12:30)			
ID	Title	Speaker	Type
472	Realistic modelling of the spectral function and quasiparticle interference in moiré systems	Peter Wahl	Invited talk (30 min.)
170	Simulation of quasiparticle interference imaging in graphene with proximity-induced spin-orbit coupling	Daniela Gonçalves	Contributed talk (15 min.)
374	Bulk Impurities/Vacancies in Nodal Loop Semimetals	João Santos Silva	Contributed talk (15 min.)
728	Efficient Real-Space Simulation of Inhomogeneous Correlated Matter	Henrique Veiga	Contributed talk (15 min.)
316	Real-Space Theory of Nonequilibrium Orbital Magnetization in Non-crystalline Systems	João Manuel Alendouro Oliveira Pinho	Contributed talk (15 min.)
511	Band structures of hyperbolic tight-binding models: Leveraging the HyperCells and HyperBloch software packages	Tomáš Bzdušek	Contributed talk (15 min.)
212	Topological Gyromorphs	Isidora Araya Day	Invited talk (30 min.)

M04 – Session 2 (Mon 21, 16:00-18:00)			
ID	Title	Speaker	Type
140	Universal mechanism for ferromagnetism in localized quasiperiodic moiré systems	Miguel Gonçalves	Invited talk (30 min.)
512	Signatures of Incommensurability in moiré Quasicrystals	Raul Liquito	Contributed talk (15 min.)
397	Quantics Purification Mean-field approach to 2D moiré materials	Nicolau Sobrosa	Contributed talk (15 min.)
285	Tensor network approach to real-space superconductivity in quasicrystals	Ricardo Oliveira	Contributed talk (15 min.)
54	Number theory meets physics: the curious case of the Aubry-André model	Balázs Hetényi	Contributed talk (15 min.)
166	Quantum geometry in disordered and quasicrystalline matter	Annica Black-Schaffer	Invited talk (30 min.)

M05 - Transport in Low-Dimensional Strongly Correlated Quantum Systems

M05 – Session 1 (Wed 23, 10:30-12:30, Chair: Igor Yurkevich)			
ID	Title	Speaker	Type
88	Variety of fractional conductances and fractional charges in the strongly interacting one-dimensional systems	Victor Kagalovsky	Invited talk (30 min.)
112	Reconstructive phase transitions in a-GeSbTe and a-GeTe compounds	Zvi Ovadyahu	Invited talk (30 min.)
249	Tailoring Quantum States in Oxide-Based Memristive Nanodevices: From Strong Correlations to Neuromorphic Computing	Victor Rouco	Invited talk (30 min.)
482	Emergent Hall viscosity in the integer quantum Hall phases of graphene-like systems	Maik Selch	Contributed talk (15 min.)
359	Interband spin-orbit coupling effect on chirality-induced spin-polarized current	Misa Nozaki	Contributed talk (15 min.)

M05 – Session 2 (Wed 23, 16:00-18:00, Chair: Igor Yurkevich)			
ID	Title	Speaker	Type
293	Extended hot-electron model and current bistability in insulating α -Y _x Si _{1-x} films	Miguel Ortuño	Invited talk (30 min.)
559	Electron-phonon decoupling in disordered films	Igor Lerner	Invited talk (30 min.)
345	Thermalization in two-dimensional strongly correlated quantum systems	Dragana Popovic	Invited talk (30 min.)
331	Towards an automated discovery of advanced topological insulators operating at elevated temperatures	Oleg Yevtushenko	Invited talk (30 min.)

M05 – Session 3 (Fri 25, 10:30-12:30, Chair: Wolfgang Lang)			
ID	Title	Speaker	Type
550	Giant photoconductance via an optically induced 2DEG at correlated oxide interfaces	Javier Villegas	Invited talk (30 min.)
498	Absolute measurement of penetration depth of superconducting thin films using microwave stripline resonators	Pratap Raychaudhuri	Invited talk (30 min.)
180	Stabilization of relaxation and reduction of decoherence by periodic biasing of TLSs in superconducting qubit circuits	Moshe Schechter	Invited talk (30 min.)
237	Long-Range Hopping in Quantum Bosons: From Non-BKT Criticality to Excitonic Supersolids	Tanul Gupta	Contributed talk (15 min.)
221	Cooper quartets in interacting nonlocal Josephson junctions	Peihao FU	Contributed talk (15 min.)

M05 – Session 4 (Thu 24, 10:30-12:30, Chair: Claire Marakke-Kikuchi)			
ID	Title	Speaker	Type
139	Electric-field-driven dissipative structures in superconductors	Shamashis Sengupta	Invited talk (30 min.)
793	Electronic Conduction in 1D -the 0.7 and Fractions in the 1D-2D Transition	Mike Pepper	Invited talk (30 min.)
108	Collective depinning and sliding of a quantum Wigner crystal in a two-dimensional electron system	Sergey Kravchenko	Invited talk (30 min.)

M05 – Session 5 (Thu 24, 16:00-18:00, Chair: Vincent Humbert)			
ID	Title	Speaker	Type
75	Superconducting Diodes Enabled by Correlated Flux Quanta Dynamics	Oleksandr Dobrovolskiy	Invited talk (30 min.)
501	Competition Between Singlet Formation and Nagaoka Ferromagnetism in a Quadruple Quantum Dot Array	Emil Siuda	Contributed talk (15 min.)
575	Complete delocalization in disordered Hatano-Nelson chains	Sergej Flach	Invited talk (30 min.)
161	Hydrodynamics and entanglement under inhomogeneous driving	Victor Eisler	Contributed talk (15 min.)
211	Quantum vs thermal fluctuations in phase transitions of two-dimensional superconductors	Andrea Ponticelli	Contributed talk (15 min.)

M05 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
347 P042	Geometric Approach to Zero-Memory Quantum Dot Reservoir Computing	Bongsu Kim	Poster
460 P043	Current precision in interacting hybrid Normal-Superconducting systems	Nahual Sobrino	Poster

M06 - Interaction Effects in Correlated Systems with Higher-Order Van Hove Singularities and Flat Bands

M06 – Session 1 (Tue 22, 10:30-12:30, Chair: Joseph Betouras)			
ID	Title	Speaker	Type
674	Signatures of heavy and light electrons in Magic Angle Twisted Bilayer Graphene	E. Bascones	Invited talk (30 min.)
670	Charge and Spin order in the generalized Wigner crystal phase in twisted bilayer MoTe ₂	Arindam Pramanik	Contributed talk (15 min.)
587	Unconventional Superconductivity in Twisted TMDs due to Renormalization (withdrawn)	Palash Saha	Contributed talk (15 min.)
655	Quantum criticality and emerging universality in flat band systems	Qimiao Si	Invited talk (30 min.)
100	Triplet superconductivity supported by an X9 high-order Van Hove singularity	Chethan Sanjeevappa	Contributed talk (15 min.)
664	Bilayer Kagome with Incommensurate Twisting: The Emergence of Higher-Order Magic Angles	David Perkins	Contributed talk (15 min.)

M06 – Session 2 (Wed 23, 10:30-12:30, Chair: Silke Buehler-Paschen)			
ID	Title	Speaker	Type
203	Observation of Anomalous Thermal Hall Effect in a Kagome Superconductor CsV ₃ Sb ₅	Minoru Yamashita	Invited talk (30 min.)
650	A hierarchy of interactions – effect of lattice, orbital and band geometry on electronic interaction in Kagome superconductors	Anirudh Chandrasekaran	Contributed talk (15 min.)
657	ARPES Investigation of Electronic Structure in MT ₆ X ₆ Kagome Compounds	Chan-young Lim	Contributed talk (15 min.)
791	Kekulé order from diffuse nesting near higher-order Van Hove points	Ronny Thomale	Invited talk (30 min.)
706	Superconductivity in kagome metals from loop current fluctuations	Daniel Schultz	Contributed talk (15 min.)
687	The magnetotropic response of the kagome metal CsV ₃ Sb ₅ in its superconducting and metallic states.	Shiva Safari	Contributed talk (15 min.)

M06 – Session 3 (Thu 24, 10:30-12:30, Chair: Peter Wahl)			
ID	Title	Speaker	Type
676	Modifying low-energy electronic states to control superconductivity in artificial two-dimensional systems	Tetsuo Hanaguri	Invited talk (30 min.)
777	Scanning Tunneling Microscopy in high vectorial magnetic fields	Jaime Rumeu Ozores	Contributed talk (15 min.)
788	A data-driven approach to correlated two-dimensional materials	Agnes Valenti	Invited talk (30 min.)
683	Signatures of coupling to bosonic modes in quasiparticle interference	Carolina de Almeida Marques	Contributed talk (15 min.)
787	Valley-Selective Correlated Insulator in twisted double bilayer WSe ₂	Abhay Pasupathy	Invited talk (30 min.)

M07 - Nickelate Superconductors: A New Platform for Unconventional Cooper-Pairing

M07 – Session 1 (Mon 21, 16:00-18:00, Chair: Ilya Eremin)			
ID	Title	Speaker	Type
563	High-field reentrant and hysteretic superconducting states in an infinite-layer nickelate	A. Ariando	Invited talk (30 min.)
389	Rare-earth and electron doping in infinite-layer and perovskite nickelate thin films	M. Gibert	Invited talk (30 min.)
671	Electronic evolution throughout the topotactic reduction of nickelates: Insights from x-ray absorption spectroscopy	Rebecca Pons	Contributed talk (15 min.)
90	The RPA+DMFT approach for unconventional superconductivity: application to nickelate superconductors	H. Chen	Contributed talk (15 min.)
160	ARPES spectra and the role of interstitial-s orbital in infinite-layer nickelates calculated by DFT+DMFT	L. Verhoff	Contributed talk (15 min.)
273	Stabilizing Magnetism in NdNiO ₂ via Self-Doping	R. Drachynskyi	Contributed talk (15 min.)
M07 – Session 2 (Tue22, 16:00-18:00, Chair: Karsten Held)			
ID	Title	Speaker	Type
51	High-temperature superconductivity in pressurized Ruddlesden-Popper nickelates	Meng Wang	Invited talk (30 min.)
174	Spectroscopic insights into the multiorbital character of density waves in Ruddlesden-Popper nickelate superconductors	Mathias Hepting	Invited talk (30 min.)
307	Advances in phase characterization and high-pressure susceptibility measurements of Ruddlesden-Popper nickelates	Abhi Jigneshkumar	Contributed talk (15 min.)
312	Decoding Superconductivity in La ₃ Ni ₂ O _{7-δ} Thin Films via Ozone-Driven Structure and Oxidation Tuning	Mathieu Flavenot	Contributed talk (15 min.)
110	Electronic Structure of La ₃ Ni ₂ O ₇	K. Jiang	Contributed talk (15 min.)
206	Correlated electrons in bilayer nickelates: from La ₃ Ni ₂ O ₇ to La ₃ Ni ₂ O ₆	F. Lechermann	Contributed talk (15 min.)
M07 – Session 3 (Wed 23, 16:00-18:00, Chair: Karsten Held)			
ID	Title	Speaker	Type
344	Microscopic origin of superconductivity and stripe magnetism in bilayer nickelates	T. Helbig	Contributed talk (15 min.)
142	Theory of density waves in low-pressure La ₃ Ni ₂ O ₇	L. Braz	Contributed talk (15 min.)
509	Systematic study of trilayer nickelates via ab initio and many-body calculations	Yuxi Zhang	Contributed talk (15 min.)
119	Self-doped Molecular Mott Insulator and d-wave Pairing in La ₃ Ni ₂ O ₇	Zh. Wang	Contributed talk (15 min.)
189	A unified theory for bulk and thin-film bilayer nickelate La ₃ Ni ₂ O ₇	J. Wang	Contributed talk (15 min.)
155	Dimensionality of vortex matter in superconducting infinite-layer nickelates	D. Sanchez-Manzano	Contributed talk (15 min.)
618	Single-band fluorides akin to infinite-layer cuprate superconductors	W. Wu	Contributed talk (15 min.)
471	Importance of long-range hopping beyond the conventional Emery model for cuprate superconductivity	E. Jacob	Contributed talk (15 min.)

M08 - Superconducting Altermagnets - Fundamentals and Devices

M08 – Session 1 (Tue 22, 16:00-18:00)			
ID	Title	Speaker	Type
167	Superconductivity in altermagnets: emergent phenomena and constraints	Annica Black-Schaffer	Invited talk (30 min.)
136	Influencing altermagnetic transitions by strain and layering	Ilya Eremin	Contributed talk (15 min.)
576	Superconducting Signatures of Altermagnetism: From Critical Anisotropies to Nonreciprocal Vortex Response	Andrei Mazanik	Contributed talk (15 min.)
476	Altermagnetic Thin Films and Their Interplay with Superconductivity	Dominik Kriegner	Invited talk (30 min.)
226	Perfect spin nonreciprocity in gated superconducting altermagnetic heterostructures	Peihao Fu	Contributed talk (15 min.)
469	Transport in Altermagnet/Superconductor Junctions with Rashba Spin-Orbit Coupling	František Herman	Contributed talk (15 min.)

M08 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
220 P005	From pure to mixed altermagnets: A study of Sr_2RuO_4 and Sr_2IrO_4	Jabed Umar	Poster
499 P006	Sublattice Degrees of Freedom and Non-Unitary Pairing in Altermagnetic Superconductors	Christian Lukas Hestbjerg Rasmussen	Poster
520 P007	Exotic vortex states within chiral superconducting states.	Frederik Alexander Stege Philipsen	Poster
431 P008	Fragility of the Magnetic Order in the Prototypical Altermagnet RuO_2	Andriy Smolyanyuk	Poster

M09 - Magnetism and Superconductivity in Nanoscale 3D Architectures

M09 – Session 1 (Tue 22, 10:30-12:30, Chairs: Claas Abert and Amalio Fernandez-Pacheco)			
ID	Title	Speaker	Type
125	From Quantum Rings to 3D Nanoarchitectures: Effects of Geometry and Topology	Vladimir M. Fomin	Invited talk (30 min.)
82	Unconventional Josephson Supercurrent Diode Effect Induced by Chiral Spin-Orbit Coupling	Andreas Costa	Contributed talk (15 min.)
96	Focused Ion Beam Nanofabrication of 3D Nanosuperconductors and Devices	Rosa Córdoba	Contributed talk (15 min.)
128	Control of topological states and magnetization dynamics on curved surfaces	Sabri Koraltan	Invited talk (30 min.)
396	Geometry-Controlled Domain Wall Evolution in 3D Spiral Nanowires	Le Zhao	Contributed talk (15 min.)
590	Generation of Bloch Points with Controlled Spin Texture Using Geometrical Boundary Conditions	Naëmi Leo	Contributed talk (15 min.)

M09 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
246 P009	Synthesis of 3D curved superconducting microstructures by atomic layer deposition of NbN	Maria Mihaescu	Poster

M10 - Mesoscopic Superconductivity and Quantum Circuits

M10 – Session 1 (Mon 21, 10:30-12:30)			
ID	Title	Speaker	Type
783	Fluxonium qubits: fabrication, control, and a path to scale	Christian Schneider	Invited talk (30 min.)
343	Longitudinal qubit readout from Jaynes-Cummings coupling and strong drive	Luciano Pereira	Contributed talk (15 min.)
229	High fidelity at high power and suppression of measurement induced state transitions in transmon readout using a non-linear coupling	Olivier Buisson	Invited talk (30 min.)
508	Infrared-Induced Quasiparticles in Superconducting Qubits	Felix Wagner	Contributed talk (15 min.)
450	Pure dephasing of superconducting qubits due to Bogolyubov quasiparticles tunneling	Kirill Dubovitskii	Contributed talk (15 min.)
272	Proximity effects in gap-engineered superconducting qubits	Giampiero Marchegiani	Contributed talk (15 min.)

M10 – Session 2 (Mon 21, 16:00-18:00)			
ID	Title	Speaker	Type
83	Surface Code hardware hamiltonian	Mohammad Ansari	Invited talk (30 min.)
61	Ultrafast Single Qubit Gates through Multi-Photon Transition Removal	Yuan Gao	Contributed talk (15 min.)
35	Lattice field theory for superconducting circuits	Neill Warrington	Contributed talk (15 min.)
115	Multiqubit gate based on parity cross resonance	Xuexin Xu	Contributed talk (15 min.)
97	Polyfluxon: generalized fluxonium featuring d -degenerate fluxon states for qudit encoding	Luca Chirolli	Contributed talk (15 min.)
659	Quantum solitons and their quantum walks in transmon arrays	Ben Blain	Contributed talk (15 min.)
797	Power-law suppression of superfluid stiffness in ultra-thin NbN films	Meenakshi Sharma	Contributed talk (15 min.)

M10 – Session 3 (Tue 22, 10:30-12:30)			
ID	Title	Speaker	Type
232	The Schmid transition in resistively shunted Josephson junction: BKT universality and transport properties	Francesco Giuseppe Capone	Invited talk (30 min.)
383	Kibble-Zurek Mechanism in the Open Quantum Rabi Model	Tommaso Pirozzi	Contributed talk (15 min.)
67	Photon counting beyond the rotating-wave approximation	Steven Kim	Contributed talk (15 min.)
445	Thermodynamic uncertainty relations for superconducting hybrid systems	Fabio Taddei	Contributed talk (15 min.)
329	Systematic studies on high Q tantalum resonators	Francesca D'Esposito	Contributed talk (15 min.)
518	Granular aluminum superinductors	Thomas Reisinger	Contributed talk (15 min.)
519	On the intrinsic nonlinearity of granular aluminium	Mitchell Field	Contributed talk (15 min.)

M10 – Session 4 (Tue22, 16:00-18:00)			
ID	Title	Speaker	Type
310	Doppler-induced tunable and shape-preserving frequency conversion of microwave wave packets	Gianluca Rastelli	Contributed talk (15 min.)
342	A topological Josephson parametric amplifier array: Directional, broadband, and low-noise amplification	Tomas Ramos	Contributed talk (15 min.)
358	Frequency-space analogy in a superconducting microwave cavity: Bloch-wave dynamics in a synthetic lattice and truncated SU(1,1) interferometry	Alessandro Irace	Contributed talk (15 min.)
548	On calorimetric detection of microwave photons via proximity effect	Michal Horodecki	Contributed talk (15 min.)
429	Quartet correlations revealed in the noise signatures of superconducting nanodevices.	Jordi Picó Cortés	Contributed talk (15 min.)
455	Artificial topological insulator realized in a two-terminal Josephson junction with Rashba spin-orbit interaction	Tomaž Rejec	Contributed talk (15 min.)
263	Switching-Current Signatures of Magnetic Avalanches in InAs/Al Nanowire Josephson Junctions	Claudio Guarcello	Contributed talk (15 min.)
517	Impact of anisotropic Polar and Anderson-Brinkman-Morel phases of p-wave superconductors on thermoelectrics properties of quantum dot based hybrid	Vrishali Sonar	Contributed talk (15 min.)

M10 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
522 P010	On demand emission of the electron-hole superposition from a proximitized quantum dot	Krzysztof Pyrchla	Poster
816 P011	Modeling Superconducting Circuits with Neural Stochastic	Lukas Sotak	Poster

M11 - Electron-Phonon Coupling in Correlated Quantum Matter

M11 – Session 1 (Mon 21, 10:30-12:30, Chair: Thomas Schaefer)			
ID	Title	Speaker	Type
98	Impact of Spin–Phonon Interactions on Magnetism in Frustrated Triangular and Kagome Lattices	Roser Valenti	Invited talk (30 min.)
731	Electron-Phonon Interaction and Strong Correlations: Friends or Enemies?	Massimo Capone	Invited talk (30 min.)
116	Nonperturbative interplay of charge and spin fluctuations in the Hubbard-Holstein model	Emin Moghadas	Contributed talk (15 min.)
473	Intertwined fluctuations and Isotope effects in the Hubbard-Holstein model from functional renormalization	Aiman Al-Eryani	Contributed talk (15 min.)
529	Exchange striction controls demagnetization in antiferromagnetic insulators	Ravi Kaushik	Contributed talk (15 min.)
146	Relevance of Lattice Disorder, Correlations, and Oxygen Dopants on Iron under Earth Core Conditions	Markus Aichhorn	Contributed talk (15 min.)

M11 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
69 P012	Unbiased functional renormalization group study of Su-Schrieffer-Heeger phonons in the two-dimensional Hubbard model	Francesco Domizio	Poster
357 P013	Spin-Phonon Coupling in Tetragonal Europium Titanate: First-Principles Insights into Magnetic Field-Induced Dielectric Shifts	Archit Banerjee	Poster

M12 - Recent Developments of the Polaron Theory

M12 – Session 1 (Mon 21, 10:30-12:30, Chair: Serghei Klimin)			
ID	Title	Speaker	Type
457	Introduction to the minicolloquium “Recent developments of the polaron theory”	Cesare Franchini; Matthew Houtput; Serghei Klimin; Jacques Tempere	Contributed talk (15 min.)
697	Inverse supersymmetry in finite temperature Bose-Fermi mixtures: Connections and differences between the Goldstino and the Polaron	Carlos Sa de Melo	Invited talk (30 min.)
41	Breakdown of Migdal-Eliashberg theory	Nikolay Prokofiev	Invited talk (30 min.)
99	Approximation-free optical conductivity and mobility of single polaron and finite density polarons by Diagrammatic Monte Carlo	Andrey S. Mishchenko	Invited talk (30 min.)

M12 – Session 2 (Mon 21, 16:00-18:00, Chair: Cesare Franchini)			
ID	Title	Speaker	Type
355	Polarons and Self-Trapped Excitons in Realistic Semiconductors	Julia Wiktor	Invited talk (30 min.)
315	X-Representation Monte Carlo for Polarons in Anharmonic Double-Well Lattices	Stefano Ragni	Invited talk (30 min.)
109	Analytical approaches to polarons in nonparabolic finite-width conduction bands	Serghei Klimin	Contributed talk (15 min.)
409	First principles theory of nonlinear long-range electron-phonon interaction	Matthew Houtput	Contributed talk (15 min.)
628	Polarons by a Coherent-state Path-integral Monte Carlo Method (withdrawn)	Ingvars Vitenburgs	Contributed talk (15 min.)
539	Relativistic description of canonical quantization of Josephson effect for the case of superconductor interfaced to semiconductor quantum dots in external magnetic field	Krzysztof Pomorski	Contributed talk (15 min.)

M12 – Session 3 (Wed 23, 10:30-12:30, Chair: Jacques Tempere)			
ID	Title	Speaker	Type
48	High-throughput analysis of polaron models and variational first-principles approach to self-trapped polarons without supercell.	Xavier Gonze	Invited talk (30 min.)
708	Interface-Engineered Coatings (Cu, Sn, and Ag) for Enhanced Flux Pinning and Multi-Filamentary Design in IMD-Processed MgB ₂ Superconducting Wires	Ali Gencer	Invited talk (30 min.)
179	Phonon spectral properties of electron-phonon coupled systems	Osor Slaven Barišić	Contributed talk (15 min.)
150	Quantum-classical study of charge transport in organic semiconductors	Darko Tanaskovic	Contributed talk (15 min.)
336	Examining the accuracy of the cumulant expansion method in electron-phonon systems	Petar Mitrić	Contributed talk (15 min.)
333	Lattice Bose polarons at strong coupling and quantum criticality	Alessio Recati	Contributed talk (15 min.)

M12 – Session 4 (Wed 23, 16:00-18:00, Chair: Matthew Houtput)			
ID	Title	Speaker	Type
123	Hamiltonian renormalization and Fermi liquid theory	Hadrien Kurkjian	Invited talk (30 min.)
66	Ab Initio Theory of Exciton Polarons and Self-Trapped Excitons	Zhenbang Dai	Invited talk (30 min.)
709	Interplay Between Laser-Engineered Surface Microstructures and Flux Line Dynamics in YBCO Superconductors	Fatima Almokdad	Contributed talk (15 min.)
178	Variational approach to polaron hopping transport	Vasilii Vasilchenko	Contributed talk (15 min.)
40	Self-Interaction of Polarons through the Piecewise Linearity Condition	Alfredo Pasquarello	Invited talk (30 min.)

M12 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
549 P014	Machine Learning Polaron Dynamics in lithium anode $\text{Li}_4\text{Ti}_5\text{O}_{12}$	Marco Barducci	Poster
612 P015	Polaron formation in quantum paraelectric SrTiO_3 and KTaO_3	Markus Schwarz	Poster
435 P016	Diagrammatic Monte Carlo for anisotropic and degenerate bands	Samuele De Amicis	Poster

M13 - Localization Dynamics in Matter and Waves

M13 – Session 1 (Thu 24, 10:30-12:30, Chair: Masayuki Kimura)			
ID	Title	Speaker	Type
103	A consistent formulation of electrodynamics and the classical electron without singularities.	Manfried Faber	Invited talk (30 min.)
106	Topological Soliton pairs with long-range Coloumbic interaction	Rudolf Golubich	Contributed talk (15 min.)
210	Topological defects in nematic liquid crystals	Samo Kralj	Invited talk (30 min.)
582	Effective Topological Charge Cancelation Mechanism	Luka Mesarec	Contributed talk (15 min.)
113	Soliton molecules and roton-mediated binding in binary condensates	Russell N. Bisset	Contributed talk (15 min.)
185	Two-dimensional spectroscopy of quantum sine-Gordon solitons with ultracold atoms	Duilio De Santis	Contributed talk (15 min.)

M13 – Session 2 (Thu 24, 16:00-18:00, Chairs: Russell Bisset and Xiaoquan Yu)			
ID	Title	Speaker	Type
68	Observations of intrinsic localized modes forming polar nanoregions in a relaxor ferroelectric	Michael Manley	Invited talk (30 min.)
677	Oscillating ring ferrodark solitons with breathing nematic core in a homogeneous spinor superfluid	Xiaoquan Yu	Contributed talk (15 min.)
713	The Hidden Geometry of Transport in Disordered Matter	Yann Chalopin	Contributed talk (15 min.)
620	Disorder Free Localization	Rohit Kishan Ray	Invited talk (30 min.)
387	Ergotropy and Dynamical Signatures of Many-Body Localization and Discrete Time Crystals in Disordered Heisenberg Chains	Francesco Formicola	Contributed talk (15 min.)
698	Levy Sachdev-Ye-Kitaev model	Alexei Andreanov	Contributed talk (15 min.)

M13 – Session 3 (Fri 25, 10:30-12:30, Chairs: Yann Chalopin and Alexei Andreanov)			
ID	Title	Speaker	Type
552	Coherent Interactions Between Discrete Breathers	Sergej Flach	Invited talk (30 min.)
768	Lifetime of breathers in an all flatband latice	Juan F.R. Archilla	Contributed talk (15 min.)
156	Ballistic energy transport in the nonlinear lattice excited by specific symmetry	Hiroki Ono	Contributed talk (15 min.)
324	Dynamics of localization in two-dimensional nanostructures	Georgios Kopidakis	Invited talk (30 min.)
176	A nonlinear coupled cantilever array with time-periodic on-site potentials and Floquet breathers	Masayuki Kimura	Contributed talk (15 min.)
38	Floquet breathers in a time-modulated nonlinear lattice	Juan F.R. Archilla	Contributed talk (15 min.)

M14 - Experimental Studies of Negatively Charged Ions

M14 – Session 1 (Mon 21, 10:30-12:30)			
ID	Title	Speaker	Type
545	Infrared action spectroscopy of molecular anions	Sandra Brünken	Invited talk (30 min.)
433	Negative ion studies at the Cryogenic Storage Ring (CSR)	Viviane C. Schmidt	Invited talk (30 min.)
781	Near-threshold photodetachment of WF ₅ ⁻ molecular anions in a cryogenic storage ring	Hubert Gnaser	Contributed talk (15 min.)
658	Mutual neutralization reactions in a cryogenic ion trap	Maximilian MŠrk	Contributed talk (15 min.)
647	Isobar separation for actinide anion beams in AMS	Andreas Wiederin	Contributed talk (15 min.)
636	Low temperature ultraviolet photodissociation spectroscopy of [dAMP-H] ⁻	Christian Sprenger	Contributed talk (15 min.)

M15 - Light-Wave Driven Dynamics in Quantum Materials

M15 – Session 1 (Thu 24, 16:00-18:00, Chair: Anna Galler)			
ID	Title	Speaker	Type
50	Peering into topological phases with attosecond spectroscopy	Antonio Picón	Invited talk (30 min.)
260	Direct subcycle momentum-resolved observation of lightwave-driven Landau-Zener-Majorana transitions in graphene	Giacomo Inzani	Contributed talk (15 min.)
172	Probing Broken Time-Reversal Symmetry in 2D Materials with Tailored-Light Photocurrent Generation	Selina Nöcker	Contributed talk (15 min.)
224	Lightwave manipulation of magnetism with tailored light: Towards Petahertz spintronics from broken symmetries	Ofer Neufeld	Invited talk (30 min.)
186	Giant dynamical paramagnetism in light-driven pseudogap YBCO	Duilio De Santis	Contributed talk (15 min.)
148	Nuclear electric resonance and vibrationally induced magnetism: Strategies for nuclear-spin-based, optical quantum control off the mainstream	Andreas W. Hauser	Contributed talk (15 min.)

M15 – Session 2 (Fri 25, 10:30-12:30, Chair: Marcus Ossiander)			
ID	Title	Speaker	Type
758	Squeezed light from strongly-driven η -pairing states in the Hubbard model	Denitsa Baykusheva	Invited talk (30 min.)
214	Ultrafast dynamics and light-induced superconductivity from first principles	Dominik Spath	Contributed talk (15 min.)
774	Nonlinear Optical Measurement of the Local Berry Curvature in an atomically thin semiconductor	Nele Tornow	Contributed talk (15 min.)
773	Tracing THz-induced metastability and coherent collective modes in a layered quantum material at the angstrom scale	Melanie Müller	Invited talk (30 min.)
205	Dynamical Control of Coulomb Interactions and Hubbard Bands in Monolayer 1T-TaS ₂	Niklas Notter	Contributed talk (15 min.)

M16 - Advances in Ultrafast Time-Resolved Ellipsometry

M16 – Session 1 (Tue 22. 10:30-12:30)			
ID	Title	Speaker	Type
691	Challenges in Quantitative Analysis of Pump-Probe Ellipsometry Data	Noah Stiehm	Invited talk (30 min.)
764	Photoinduced Ultrafast Phase Transition in VO ₂ Thin Films Monitored by Time-Resolved Spectroscopic Ellipsometry	Mateusz Rebarz	Invited talk (30 min.)
63	Observation of entangled electron-zone boundary phonon states with transient spectroscopic ellipsometry	Kurt Hingerl	Contributed talk (15 min.)
481	Transient Pump-Probe Ellipsometry on Organic and Inorganic Thin Films: Excitons versus Free Charge Carriers	Manuela Schiek	Contributed talk (15 min.)

M17 - Emerging Trends in Dielectric Nanophotonics

M17 – Session 1 (Tue 22, 10:30-12:30)			
ID	Title	Speaker	Type
37	Discovering new high-refractive-index optical materials	Søren Raza	Invited talk (30 min.)
158	Hybrid Dielectric Nanophotonics with 2D Semiconductors: Scalable Platforms for Valley-Selective Light-Matter Interactions	Zlata Fedorova	Contributed talk (15 min.)
423	Bridging quantum to Classical Optics with Feibelman Parameters: from TDDFT to Mesoscopic Maxwell Solvers for Plasmonics	Lorenz Huber	Contributed talk (15 min.)
684	A Novel Chiroptical Spectroscopy Technique	Jorge Olmos	Invited talk (30 min.)
287	Enhanced Molecular Chiral Response Driven by Crosstalking Quasi-Bound States in the Continuum	Diana Shakirova	Contributed talk (15 min.)
305	Topology-Driven Exciton-Polaritonic Flatbands in Anisotropic van der Waals Metasurface	Alexander Antonov	Contributed talk (15 min.)

M17 – Session 2 (Tue 22, 16:00-18:00)			
ID	Title	Speaker	Type
427	Sub-diffractive dielectric structures using STED-inspired optical lithography	Thomas Klar	Invited talk (30 min.)
300	Pole expansion of the scattering matrix via rescaled scattering channels	Elias Föslleitner	Contributed talk (15 min.)
653	Temporal dynamic scattering of resonant metastructures	Kirill Koshelev	Invited talk (30 min.)
159	Completeness of eigenmodes and calculation of light scattering with the resonant-state expansion	Zoltan Sztranyovszky	Contributed talk (15 min.)
169	AAA rational approximation for nanophotonic resonance problems	Felix Binkowski	Contributed talk (15 min.)
682	All-Dielectric Metasurfaces for High-Efficiency Color Down-Conversion in Next-Generation RGB MicroLEDs	Hadi Shamkhi	Contributed talk (15 min.)

M18 - Light-Driven Processes at Interfaces

M18 – Session 1 (Thu 24, 10:30-12:30, Chair: Moritz Eder)			
ID	Title	Speaker	Type
209	Light-Driven Chemistry at Plasmonic Interfaces: an Atomistic Perspective	Tommaso Giovannini	Invited talk (30 min.)
177	Photocatalysis for Solar Fuels: Exploring interfaces in well-defined Hybrid Molecular Photosystems	Stephen Nagaraju Myakala	Contributed talk (15 min.)
723	Nonequilibrium electron kinetics and interfacial charge transfer at plasmonically driven metal–molecule contacts	Jon Scouten	Contributed talk (15 min.)
558	Near-Field Vibrational Energy Transfer and Upconversion in Plasmonic NanoCavities	Rohit Chikkaraddy	Invited talk (30 min.)
602	Disentangling electronic and phononic energy dissipation at non-contact junctions via first principles	Lukas Hoermann	Contributed talk (15 min.)
424	Ultrafast photoinduced dynamics of hydrogen and functionalized thiolates on gold surfaces	Shreya Sinha	Contributed talk (15 min.)

M18 – Session 2 (Thu 24, 16:00-18:00, Chair: Lukas Hoermann)			
ID	Title	Speaker	Type
553	Light-induced structural dynamics: from static structure-property correlation of single metal nanoparticles to in situ TEM monitoring	Wiebke Albrecht	Invited talk (30 min.)
750	Model reactions in plasmon catalysis: from p-nitrothiophenol coupling to alkoxyamine homolysis	Alina Gorbunova	Contributed talk (15 min.)
672	Heterogeneous Photocatalysis on Single-Crystalline Semiconductors	Moritz Eder	Contributed talk (15 min.)
593	Towards machine learning approaches in plasmonic solid–molecule systems for sensing and catalysis	Guselnikova Olga	Invited talk (30 min.)
219	Photoswitching of azobenzene derivatives on a Au(111) surface	Matthew J. Timm	Contributed talk (15 min.)
399	How disorder impacts plasmonic and catalytic properties of (bi)metallic superlattices	Adam Vavrečka	Contributed talk (15 min.)

M18 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
95 P044	Photoisomerization of azobenzene derivatives on Au (111) using various photon energies and polarizations	Haraprasad Mandal	Poster
264 P045	Spectral signature of non-equilibrium, high-density incoherent excitons	Katja Sophia Moos	Poster
401 P046	Machine-Learned Atomistic Simulations of Nonadiabatic Energy Transfer at Interfaces and Nanoclusters	Fabian Jöbstl	Poster
319 P047	Vibrational Strong Coupling Modifies the Thermal Properties of Water	Jonas Müller	Poster
595 P048	Electronic friction simulations of laser-driven hydrogen evolution. Does surface coverage matter?	Alexander Spears	Poster

M19 - Time-Resolved Photoemission Orbital Tomography

M19 – Session 1 (Tue 22, 10:30-12:30)			
ID	Title	Speaker	Type
503	Time-resolved Photoemission Orbital Tomography: The Route to Orbital Cinematography	F. Stefan Tautz	Invited talk (30 min.)
199	Time-resolved photoemission orbital tomography of molecular excitations at surfaces	Marcel Theilen	Contributed talk (15 min.)
475	Capturing exciton wavefunctions by time-resolved photoemission orbital tomography	Wiebke Bennecke	Invited talk (30 min.)
233	Pushing subcycle momentum microscopy towards attosecond temporal resolution	Jakob Helml	Contributed talk (15 min.)
492	Matrix element effects in time-resolved photoemission tomography from a non-equilibrium Greens function approach	Christian Kern	Contributed talk (15 min.)

M19 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
245 P017	Geometric and electronic properties of heptahelicene on Ag(110)	Fabian Dixer	Poster
265 P018	Photoemission tomography of excitons in periodic systems	Siegfried Kaidisch	Poster
502 P019	New laser system for time-resolved photoemission orbital tomography	Eric Fackelman	Poster
606 P020	Molecular Orientation Determination of BTBT on Ag(110) Using Robust Sparse PhaseLift Orbital Tomography	Kaori Niki	Poster

M20 - The New Frontiers of Angle-Resolved Photoemission Spectroscopy: Spin, Time and Spatial Resolution

M20 – Session 1 (Mon 21, 16:00-18:00, Chair: Francesco Presel)			
ID	Title	Speaker	Type
395	Single domain spectroscopic signatures of a magnetic Kagome metal	Lukasz Plucinski	Invited talk (30 min.)
740	Momentum space signatures of molecular orbitals on a ferromagnetic surface	Martin Anstett	Contributed talk (15 min.)
742	Probing Spin-Dependent Electronic Structure Across an Oxide Barrier: Spin-Resolved ARPES of Buried MgO/Fe Interfaces	David Janas	Contributed talk (15 min.)
699	Unconventional magnetism	Federico Mazzola	Invited talk (30 min.)
627	Spin polarization dynamics of free carriers in 2H-WSe ₂	Pierre Nonnon	Contributed talk (15 min.)
373	ARPES simulations from first principles via Kohn-Sham scattering states	Gian Parusa	Contributed talk (15 min.)

M20 – Session 2 (Tue 22, 16:00-18:00, Chair: Giovanni Zamborlini)			
ID	Title	Speaker	Type
534	Competing interactions in the electronic structure of advanced materials	Claudia Draxl	Invited talk (30 min.)
163	Circular dichroism in the photoelectron angular distribution of achiral molecules	Peter Puschnig	Contributed talk (15 min.)
266	Tracing the film structure of an organic semiconductor with photoemission orbital tomography	Monja Stettner	Contributed talk (15 min.)
412	Disrupting pi-Conjugation: How Carbonyl Groups Reshape the Electronic Landscape of Pentacene	Andrei Matetskii	Contributed talk (15 min.)
59	Momentum-resolved signatures of ultrafast orbital excitations in van der Waals antiferromagnets	Mirko Cinchetti	Invited talk (30 min.)
642	Ultrafast exciton dynamics in metal-phthalocyanine/WSe ₂ heterostructures	Gregor Zinke	Contributed talk (15 min.)

M20 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
579 P021	Electronic Band Engineering in Two-Dimensional Bimetallic Metal-Organic Frameworks	Maedeh Hakimi	Poster
569 P022	Single Ni Atoms Drive Carboxyl Deprotonation in Metal-Organic Chains	Dominik Brandstetter	Poster

M21 - Recent Developments in Machine Learned Interatomic Potentials

M21 – Session 1 (Wed 23, 10:30-12:30, Chair: Egbert Zojer)			
ID	Title	Speaker	Type
739	From Specialized to Foundational: Machine Learning Interatomic Potentials at Scale	Ralf Drautz	Invited talk (30 min.)
604	Exploring Data-Efficient Fine-Tuning and Training Strategies for Accurate Machine-Learning Interatomic Potentials	Jonas Hänseroth	Contributed talk (15 min.)
770	Complex Configurations with Quantum Accuracy: Dynamics of Molecular Liquids from a General-Purpose Machine-Learned Potential	Florian Brünig	Contributed talk (15 min.)
737	Self-Consistent Fine-Tuning of Machine Learning Interatomic Potentials by Targeted Exploration of Configuration Space	Julien Steffen	Contributed talk (15 min.)
364	Mechanical and thermal properties of complex materials from machine-learned interatomic potentials	Florian Lindner	Contributed talk (15 min.)
660	Liquid water with MLIPs: The importance of long-range interactions (withdrawn)	Ari Paavo Seitsonen	Contributed talk (15 min.)
388	Learning Long-Range Electrostatics via Born Effective Charges in Atomistic Machine Learning	Angela Rittsteuer	Contributed talk (15 min.)

M21 – Session 2 (Wed 23, 16:00-18:00, Chair: Christian Dreßler)			
ID	Title	Speaker	Type
766	Transition-Point Sampling via Stochastic Saddle Point Dynamics for Training Machine-Learned Interatomic Potentials	Sandro Wieser	Invited talk (30 min.)
73	High-Throughput ML-accelerated Exploration of Conformal Funnels in NanoCatalysis	Alessandro Fortunelli	Contributed talk (15 min.)
610	Machine Learning Interatomic Potentials for Cooperative Sulfur Vacancy Dynamics in Two-Dimensional MoS ₂	Aaron Flötotto	Contributed talk (15 min.)
638	Versatile correlated frozen phonons from universal MLIPs for (S)TEM/EELS simulations	Toma Susi	Contributed talk (15 min.)
393	Using machine-learned interatomic potentials for accurate thermal conductivity predictions via non-equilibrium molecular dynamics	Florian Unterkofler	Contributed talk (15 min.)
717	Unraveling Polymorphism and Heat Transport in Hydrogen-Bonded Molecular Crystals using MACE Models	Lukas Legenstein	Contributed talk (15 min.)
479	Machine-Learning Supported Reaction Mechanism Exploration of cis-trans Isomerisation in Retinal	Kai Töpfer	Contributed talk (15 min.)

M21 – Session 3 (Thu 24, 10:30-12:30, Chair: Christian Dreßler)			
ID	Title	Speaker	Type
794	Prokyon – A Free On-the-Fly Machine Learning Library based on Sparse Gaussian Processes	Martin Brehm	Contributed talk (15 min.)
785	Elucidating the Complex Chemistry and Importance of Quantum Effects in High-Performing Electrolyte Solutions using SE(3)-Equivariant Transformer Network Potentials	Mark E. Tuckerman	Invited talk (30 min.)

M22 - Compressing Complexity: Machine Learning in Hard and Soft Condensed Matter Physics

M22 – Session 1 (Mon 21, 16:00-18:00, Chair: Carina Karner)			
ID	Title	Speaker	Type
622	Learning to cross barriers: Machine learning for rare event simulations	Christoph Dellago	Invited talk (30 min.)
441	Efficient Partition Function Estimation via Coordinate Design and Surrogate-Guided Sampling	Johannes Krondorfer	Contributed talk (15 min.)
580	A synergistic approach to the parameter exploration of soft matter systems	Emanuele Locatelli	Contributed talk (15 min.)
447	Learning Dynamics of Autoencoders on Ising model data	Max Weinmann	Contributed talk (15 min.)
609	Normalizing Flows for Atomistic Simulations of Condensed Matter Systems	Alessandro Coretti	Contributed talk (15 min.)

M22 – Session 2 (Tue 22, 16:00-18:00, Chair: Markus Wallerberger)			
ID	Title	Speaker	Type
74	Machine learning latent orders from the two-particle vertex	Sabine Andergassen	Invited talk (30 min.)
64	Neural ODEs for Reduced-Order Quantum Many-Body Dynamics: Assessing Memory Effects	Patrick Egenlauf	Contributed talk (15 min.)
681	Data-Driven Inference of Colloidal Interactions	Florian Benedetti	Contributed talk (15 min.)
432	Accurate Prediction of Dielectric Tensors via Equivariant Graph Neural Networks	Erik Pabst	Contributed talk (15 min.)
585	Symmetry-Aware Machine Learning for Local Structure Classification in Condensed and Soft Matter	Jakob Hausberger	Contributed talk (15 min.)

M23 - Ab initio Modeling and Machine Learning of Crystal Defects

M23 – Session 1 (Mon 21, 10:30-12:30)			
ID	Title	Speaker	Type
58	Machine-learning potentials for materials modeling of alloys	Max Hodapp	Invited talk (30 min.)
752	Foundational machine learning interatomic potentials: A paradigm shift in atomistic simulations?	Matous Mrovec	Invited talk (30 min.)
489	Machine Learning Interatomic Potentials for Defective TaN: Balancing Energy Precision and Stress-Informed Weighting	Kailun Sha	Contributed talk (15 min.)
422	Capturing step-flow growth and defect formation in silicon carbide combining molecular dynamics and Monte Carlo simulations	Alexander Reichmann	Contributed talk (15 min.)
120	First-principle based description of defects in complex alloys with magnetic and compositional disorder	Franco Moitzi	Contributed talk (15 min.)
405	Magnetic exchange interactions at grain boundaries in iron	Martin Zelený	Contributed talk (15 min.)

M23 – Session 2 (Tue 22, 10:30-12:30)			
ID	Title	Speaker	Type
328	Vacancy-Controlled Strengthening and Toughening Mechanisms in Transition Metal Nitrides	David Holec	Invited talk (30 min.)
718	Defect-Engineered Ferroelectricity and Magnetoelectric Coupling in LaXO ₃ Perovskite Oxides	Souren Majani	Contributed talk (15 min.)
487	Segregation of vacancies to grain-boundaries in W	Christoph Dösinger	Contributed talk (15 min.)
407	Doping of tin sulfide for novel phase stabilisation	Guy Makov	Contributed talk (15 min.)
428	Spin-Selective Optical Cycles in Color Centers	Mirjam Neubauer	Contributed talk (15 min.)
121	Ab initio modeling of mechanical properties in Fe-Si-Al alloys using Machine Learned Interatomic Potentials	Daniil Khodachenko	Contributed talk (15 min.)
350	Atomistic description of crystal defects in SiC	Lorenz Romaner	Contributed talk (15 min.)
746	Efficient descriptors for modeling of disordered metallic alloys	Oleg Peil	Contributed talk (15 min.)

M23 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
65 P023	Exploring Magnetism, Half-Metallicity, and Thermoelectric Response in Antifluorite-Type K ₂ IrX ₆ (X = Cl, Br, and I) Hexahalides: A First-Principles Study	Asma Bouabca	Poster
468 P024	Phase-dependent shear behaviour in MAB phases driven by Al layers and defects using ML potentials	Priyanshu Sorout	Poster

M24 - Computational Frontiers in Structure Prediction, Lattice Dynamics, and Electron-Phonon Coupling

M24 – Session 1 (Thu 24, 16:00-18:00)			
ID	Title	Speaker	Type
104	Structural disorder and superconductivity: what first-principles calculations can already tell us	Simone Di Cataldo	Invited talk (30 min.)
216	Toward a predictive ab initio description of superconductivity in NbN	Eva Kogler	Invited talk (30 min.)
380	Escaping Local Minima: Searches for Ternary Hydride Superconductors Using hot-AIRSS	Kieran Bozier	Contributed talk (15 min.)
692	Comprehensive First-Principles Description of Spin-Phonon Coupling in Nitrogen-Vacancy Diamond	Zhishuo Huang	Contributed talk (15 min.)
711	Challenges in Machine-learning Based Non-Adiabatic Molecular Dynamics for Nano-porous Graphene	Bernhard Kretz	Contributed talk (15 min.)
477	Understanding How Pressure Enhances Heat Transport in Organic Semiconductors	Lukas Legenstein	Contributed talk (15 min.)

M24 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
56 P049	Ab initio excitons and electron-phonon coupling in half-Heuslers	Vinod Solet	Poster
415 P050	Reliable Super-Resolution for Real-Time Electronic Structure Theory	Alexander Gorfer	Poster
421 P051	Universal MLIPs for High-Throughput Anharmonic Stability Screening	Ralf Meyer	Poster
425 P052	Machine Learning of Temperature-Dependent Optical Spectra	Johannes Laurenz Wolf	Poster
649 P053	Predicting Oxygen-Centered Polarons From Local Disorder in NMC622	Cristian Vijeiu	Poster

M25 - Magnetism Research in the Central Europe Region

M25 – Session 1 (Wed 23, 10:30-12:30, Chair: Neven Barišić)			
ID	Title	Speaker	Type
591	Magneto-optical detection of time-reversal symmetry breaking in antiferromagnets	Veronika Sunko	Invited talk (30 min.)
573	Spin transport in antiferromagnets and altermagnets	Helena Reichlova	Invited talk (30 min.)
583	Dynamics of proximity- induced magnetism at cobalt/molecular interfaces	Tomaž Mertelj	Invited talk (30 min.)
542	A theoretical study of vibrational magnetism: From molecular pseudorotation to dynamical multiferroicity in the bulk.	Matthias Diez	Contributed talk (15 min.)
191	Theoretical framework for polarization dependent magneto-absorption in (anti)ferromagnetic materials	Stáňa Tázlarů	Contributed talk (15 min.)

M26 - 2D Material Research in the Central Europe Region

M26 – Session 1 (Wed 23, 16:00-18:00, Chair: Tomáš Bzdušek)			
ID	Title	Speaker	Type
572	Graphite-gate-defined devices in bilayer graphene	Andrea Hofmann	Invited talk (30 min.)
757	Tuning van der Waals heterostructures with pressure	Péter Makk	Invited talk (30 min.)
586	Strong charge–photon coupling and simulation-guided design in low-dimensional quantum dot systems	Marián Janík	Invited talk (30 min.)
630	Investigation of rhombohedral multilayer graphene via tunable moiré superlattices	Matteo Ablasser	Contributed talk (15 min.)
361	Broadband Charge Transport in 2D $\text{Ti}_3\text{C}_2\text{T}_x$ MXene Thin Films: From D.C. to 80 THz	Kunal Tiwari	Contributed talk (15 min.)

M26 – Session 2 (Thu 24, 10:30-12:30, Chair: Wolfgang Lang)			
ID	Title	Speaker	Type
771	Chiral states in classical and quantum spin models	Karlo Penc	Invited talk (30 min.)
571	Interface-engineered switchable polar states down to a single unit cell	Nives Strkalj	Invited talk (30 min.)
525	Excitonic Effects Modeling in van der Waals Heterostructures of 2D Materials	Frantisek Karlicky	Invited talk (30 min.)
635	Quantum sensing of a nanoscale electronic phase segregation in an oxygen-deficient Mn-doped CaFe_3O_5 perovskite oxide	Izidor Benedičič	Contributed talk (15 min.)
536	Stress induced uniaxial magnetic anisotropy in $\text{AlScN}/\text{CoFeB}$ magnetoelectric thin films	Manoj Matpathi	Contributed talk (15 min.)

M27 - 2D Materials-Synthesis, Surfaces, Dynamics, Devices

M27 – Session 1 (Wed 23, 10:30-12:30, Chair: Anna Galler)			
ID	Title	Speaker	Type
230	From Strong to Weak Correlations in Breathing-Mode Kagome van der Waals Materials—Nb ₃ (F,Cl,Br,I) ₈ as a Robust and Versatile Platform for Many-Body Engineering	Malte Rösner	Invited talk (30 min.)
143	A first-principles framework for strain-driven exciton transport in 2D TMDs	Amir Kleiner	Contributed talk (15 min.)
402	Solving the Phase Problem of Diffraction: XSW Imaging on Bismuthene/SiC(0001)	Serguei Soubatch	Contributed talk (15 min.)
760	High-harmonic spectroscopy of a sliding ferroelectric	Elias Greil	Contributed talk (15 min.)
227	Benchmarking Edge Contacts for Sub-15 nm MoS ₂ Transistors: Metal, Phase-Engineered, and Semimetal Approaches	Mate Capin	Contributed talk (15 min.)
769	Investigation of the vibrational, chemical and electrical properties of 2D-GeCH ₃	Zahra Kamranipour	Contributed talk (15 min.)
286	Realizing Scalable Chemical Vapour Deposition of Monolayer Graphene Films on Iron with Concurrent Surface Hardening by in situ Observations	Bernhard Bayer	Contributed talk (15 min.)

M27 – Session 2 (Wed 23, 16:00-18:00, Chair: Anton Tamtögl)			
ID	Title	Speaker	Type
753	Tailoring the Interlayer Environment of Ti ₃ C ₂ MXene for Sulfur Cathodes	Asia Sarycheva	Invited talk (30 min.)
362	Novel Mo ₂ C thin film synthesis approach towards electrochemical sensing applications	Markus Eiberger	Contributed talk (15 min.)
382	Polymer–2D Material Composite Coatings for Durable Solid Lubrication	Martin Nastran	Contributed talk (15 min.)
693	Enhancing the unusually strong electron-phonon kinks in hBN	Justin Wells	Invited talk (30 min.)
262	Charge Transport and Neuromorphic Photoconductivity in 2D Single-Crystal Lead-Free PEA ₂ SnI ₄	Ofelia Durante	Contributed talk (15 min.)
297	Controlled growth of ultrathin 2D Mo ₂ C at lowered pressures	Johannes Jerczynski	Contributed talk (15 min.)

M27 – Session 3 (Thu 24, 10:30-12:30, Chair: Bernhard Bayer)			
ID	Title	Speaker	Type
568	Synthesis and Characterization of Two-Dimensional Diboron Trioxide Crystal Composed by Boroxol Groups	Alessandro Sala	Invited talk (30 min.)
645	Strain-Mediated Lattice Reconstruction Enhances Ferromagnetism in Cr ₂ Ge ₂ Te ₆ /WTe ₂ van der Waals Heterobilayers	Franz Herling	Contributed talk (15 min.)
484	Molecular Motion on Graphene and h-BN: The Role of Surface Polarity and Substrate Coupling	Anton Tamtögl	Contributed talk (15 min.)
605	Playing with Molecular Magnetism by Surface-Mediated Reaction in Vacuum (withdrawn)	Lorenzo Poggini	Contributed talk (15 min.)
514	Fluorophlogopite as a Strong van der Waals Gate Dielectric for MoS ₂ Electronics: Breakdown, Electrostatics, and Memory Effects	Simon Leitner	Contributed talk (15 min.)
313	A paradigm shift in sustainable synthesis of MXenes via interfacial phenomena	Pierluigi Bilotto	Contributed talk (15 min.)

M27 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
289 P054	Liquid phase exfoliated hexagonal boron nitride nanosheet composites towards heat spreader application	Njomza Isufaj	Poster
290 P055	ZapTherm: direct in-plane thermal conductivity measurement of 2D material thin films via modified laser-flash-method	Manuel Baumgartner	Poster
294 P056	Study of in-situ crystallization and phase evolution of (AlCrTaTiNb)O ₂ high entropy oxides in atomic resolution (S)TEM	Roman Neuhauser	Poster
411 P057	Quantitative study of ion beam-enhanced reactivity of MoS ₂	Francesco Laudani	Poster
584 P058	Carbon nanobuds as a 2D hybrid material: topology-constrained synthesis, devices, and outlook	Reto Stamm	Poster
557 P059	Adsorption energy prediction and mechanistic analysis of metal atoms on MXene surfaces based on DFT and machine learning	Wenlong Xi	Poster
326 P060	Quantum Capacitance and Stability of Ti _a V _β C _(a+β-1) Double Transition Metal MXenes: A DFT study	Hamidreza Jouypazadeh	Poster

M28 - Ultrafast and Topological Mechanisms of Ferroic Switching

M28 – Session 1 (Mon 21, 10:30-12:30, Chair: Andrei Pimenov)			
ID	Title	Speaker	Type
574	Ultrafast phononic switching of ferroic order	Andrei Kirilyuk	Invited talk (30 min.)
339	Coupled Dynamics of Quantum Orbitals and Quasi-Classical Magnons in Antiferromagnets	Rostislav Mikhaylovskiy	Invited talk (30 min.)
527	Diversity of ultrafast laser-induced demagnetization of antiferromagnetic insulators	Aleksandr Buzdakov	Contributed talk (15 min.)
533	Topological order parameter switching	Sergey Artyukhin	Contributed talk (15 min.)

M28 – Session 2 (Tue 22, 10:30-12:30, Chair: Sergey Artyukhin)			
ID	Title	Speaker	Type
678	Dynamics of periodically driven topological magnetic defects	Maxim Mostovoy	Invited talk (30 min.)
451	All-optical switching of antiferromagnetic domains in ferrotoroidic LiNiPO ₄	Shingo Toyoda	Invited talk (30 min.)
181	Multi-cell unit storage based on a multiferroic	Maksim Ryzhkov	Contributed talk (15 min.)
544	Observation of Relativistic Domain Wall Motion in Amorphous Ferrimagnets	Pietro Diona	Contributed talk (15 min.)
546	E-field induced unidirectional motion of domain wall in a ferromagnet and time crystals	Margherita Parodi	Contributed talk (15 min.)

M29 - Nanomechanical, Electromechanical, Optomechanical and Levitated Systems

M29 – Session 1 (Tue 22, 10:30-12:30, Chair: Albert Schliesser)			
ID	Title	Speaker	Type
306	Probing the quantum motion of a MHz mechanical resonator with a resonant rf-fluxonium	Samuel Deléglise	Invited talk (30 min.)
321	Carbon nanotube electromechanical force sensor readout through a Josephson travelling wave parametric amplifier	Patrick Steger	Contributed talk (15 min.)
537	Beyond Internal Resonance: Controlled Energy Transfer in nonlinear Nanomechanical Resonators	Omid Reza Ranjbar Naeini	Contributed talk (15 min.)
363	Surface Loss Reduction by Hyperthermal Annealing in Silicon Nitride Resonators	Nicola Cavalleri	Contributed talk (15 min.)
236	Fluctuation instabilities via internal resonance in a multimode membrane resonator as a mechanism for frequency combs	Elke Scheer	Contributed talk (15 min.)
370	Quantum-to-classical crossover in a ultra-strongly coupled nanomechanical Rabi system	Janine Franz	Invited talk (30 min.)

M29 – Session 2 (Tue 22, 16:00-18:00 , Chair: Elke Scheer)			
ID	Title	Speaker	Type
408	Hybrid Quantum Systems with Ultra-coherent Mechanical Resonators	Albert Schliesser	Invited talk (30 min.)
772	Dynamical Phase Transitions Across Slow and Fast Regimes in a Two-Tone Driven Duffing Resonator	Soumya Kumar	Contributed talk (15 min.)
303	Photon Blockade in cavity optomechanics at finite drive	Yvan Briard	Contributed talk (15 min.)
420	Toward Multimode Photothermal Sensing	Dylan Litchfield	Contributed talk (15 min.)
356	Observing vibration-induced local temperature changes in a silicon nitride membrane under large-amplitude vibration	Valentin Barth	Contributed talk (15 min.)
467	Resolving Abrikosov Vortex Entry in a Superconducting Nanostring via Cavity Optomechanics	Tahereh Parvini	Invited talk (30 min.)

M29 – Session 3 (Wed 23, 16:00-18:00, Chair: Anja Metelmann)			
ID	Title	Speaker	Type
506	Toward sympathetic cooling of a nanoparticle with an ion	Tracy Northup	Invited talk (30 min.)
234	Engineering collective motion and light scattering in a nanoparticle tweezer array	Uros Delic	Contributed talk (15 min.)
485	Ultralow loss Meissner-levitated rotor	Andrea Vinante	Contributed talk (15 min.)
309	Optomechanical Cooling without Residual Heating	Ciprian Padurariu	Contributed talk (15 min.)
335	Magnetically Levitated Systems Approaching the Quantum Regime	Pietro Oreglia	Contributed talk (15 min.)
540	Non-reciprocal interactions and entanglement between optically levitated nanoparticles	Benjamin Stickler	Invited talk (30 min.)

M29 – Session 4 (Thu 24, 16:00-18:00, Chair: Silvan Schmid)			
ID	Title	Speaker	Type
495	Overcoming Fundamental Design and Noise Limitations of MEMS Resonators	Daniel Platz	Invited talk (30 min.)
89	Efficient mapping and tracking the properties of micromechanical resonators using phase-lock loops with closely-spaced frequencies	Menno Poot	Contributed talk (15 min.)
239	Optimizing highly symmetric 2D Nanomechanical resonators beyond band-gap Phononic crystals	Mohit Kumar	Contributed talk (15 min.)
261	Tuning of on-chip mechanical resonators on SiC by bending-induced stress	Heiko Weber	Contributed talk (15 min.)
299	UV-Vis-NIR Complex Refractive Index Characterization of Silicon Nitride Thin Films	Thomas Mathias Tropper	Contributed talk (15 min.)
434	Neuron-Inspired Computing via Phonon-Cavity Dynamics in Coupled Microelectromechanical Drum Resonators	Theresa Farah	Invited talk (30 min.)

M29 – Session 5 (Fri 25, 10:30-12:30, Chair: Gianluca Rastelli)			
ID	Title	Speaker	Type
466	Nonlinearity as a Resource for Optomechanics	Anja Metelmann	Invited talk (30 min.)
223	Experimental Quantification of Nonlinear Mode-Coupling in Nanomechanical Resonators using Multi-tone Excitation	Chris Wattjes	Contributed talk (15 min.)
53	Non-reciprocal interactions between a mechanical oscillator and an atomic spin system	Gian-Luca Schmid	Contributed talk (15 min.)
531	Nanomechanics in the atomically thin amorphous limit	Liga Jasulaneca	Contributed talk (15 min.)
284	Frequency Stability of Graphene Nonlinear Parametric Oscillator	Enise Kartal	Contributed talk (15 min.)
369	Tuning and Mapping of Two-Tone Optomechanical Instability up to the Physical Limits	Marco Dicosta	Invited talk (30 min.)

M29 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
149 P061	Towards a mechanical nonlinearity in the few-phonon regime based on the Casimir force	Matthijs de Jong	Poster
474 P062	Two-Level-System Induced Frequency Shift in AlN-based SAW Resonators at Ultra-Low Temperatures down to 10 mK	Christoph Anton Schallert	Poster
515 P063	Squeezing in Coupled Nanomechanical Resonators	Xin Zhou	Poster
594 P064	Raman Spectroscopy of Single Levitated Nano Particles in a Paul Trap	David Jakob	Poster
755 P065	Optomechanical Cavities as Physical Reservoirs: Dynamical Regimes and Noise Resilience from a Coupled-Mode Theory Perspective	Samaneh Moeini	Poster

M30 - Focused Beam Technologies for Functional Nanodevices

M30 – Session 1 (Wed 23, 10:30-12:30)			
ID	Title	Speaker	Type
796	Direct-Write Nanofabrication of Functional Devices Using Focused Particle Beams	Robert Winkler	Invited talk (30 min.)
126	3D Nanomagnetism Enabled by Focused Electron/Ion Beams	Amalio Fernandez-Pacheco	Invited talk (30 min.)
137	Growth of nanotips by FEBID, and their use in Biology, Materials Science and Nanomagnetism	Jose Maria De Teresa	Contributed talk (15 min.)
204	Direct-Write Fabrication of Silver Nanostructures with Metallic behaviour and High-Performance SERS Response via FIB Irradiation of Organometallic Films	Juan Ignacio Ocaña Parral	Contributed talk (15 min.)
488	Development of heavy noble gas field ion sources using an iridium coated single crystalline tungsten emitter	Amina Zid	Contributed talk (15 min.)
784	Computational multiscale modelling of the nanopillar growth using focused electron beam induced deposition	Alexey Verkhovtsev	Contributed talk (15 min.)

M30 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
705 P066	W-C Nanocomposites via Xe ⁺ Plasma Focused Ion Beam Induced Deposition	Jan Michalik	Poster
152 P067	Direct-Write Fabrication of Ultrathin Nb-Based Memristive Devices by Focused Electron Beam Induced Deposition	Harald Plank	Poster
153 P068	Magnetic-Conductive MC Nanoprobes for Advanced AFM Fusing Functionalities via 3D Nanoprinting	Harald Plank	Poster
154 P069	Functional Imprinting: Local Modification of Beam Induced Deposits	Harald Plank	Poster
171 P070	Optimization of Horizontal Nanowire Growth in FEBID for 3D Nanoprinting	Gabriel Andrade de Paula	Poster
323 P071	Python-Based Automation of 3D FEBID Nanofabrication	Stefan Mikulik	Poster
84 P072	Cryogenic Focused Ion Beam for the study of anisotropy in the magnetotransport properties of bismuth	Amaia Sáenz-Hernández	Poster
566 P073	The fate of organic ligands in gas assisted e-nanoprinting of metals	Ivo Utke	Poster

M31 - Metal and Metal Oxide Particles for Catalysis and Sensorics

M31 – Session 1 (Thu 24, 10:30-12:30, Chair: Wolfgang Ernst)			
ID	Title	Speaker	Type
267	Structure and Dynamics of Metal Clusters	Rolf Schäfer	Invited talk (30 min.)
351	Cluster beam deposition of bimetallic nanoalloys: From gas-phase growth to catalytic function	Ewald Janssens	Invited talk (30 min.)
443	Charge and electronics in dinitrogen activation by transition metal clusters	Gereon Niedner-Schatteburg	Contributed talk (15 min.)
730	Multiple roles of metal nanoparticles in tuning surface reactivity	Alexander Genest	Contributed talk (15 min.)

M31 – Session 2 (Thu 24, 16:00-18:00, Chair: Günther Rupprechter)			
ID	Title	Speaker	Type
463	The Power of Imperfections: A New Paradigm in Catalysis	Beatriz Roldan Cuenya	Invited talk (30 min.)
562	Metal Nanoparticle Catalysts for Hydrogen Evolution	Alessandro Fortunelli	Invited talk (30 min.)
719	Redox dynamics of Co and Cu nanotips imaged by in situ field emission microscopy	Johannes Zeininger	Contributed talk (15 min.)
465	Advanced Electron Microscopy of Metal Clusters Grown Inside Superfluid Helium Droplets	Ferdinand Hofer	Contributed talk (15 min.)

M32 - Physical Vapor Deposition of Nitride Thin Films

M32 – Session 1 (Mon 21, 10:30-12:30)			
ID	Title	Speaker	Type
608	Wurtzite Ferroelectrics for Harsh Environment Memory Applications	Simon Fichtner	Invited talk (30 min.)
102	Al(X)N-based thin films for advanced MEMS applications	Marco Deluca	Contributed talk (15 min.)
280	Heterovalent Alloying of AlN-based Thin Films	Wayne Yeo	Contributed talk (15 min.)
461	AlYN thin films with high Y concentration using reactive magnetron sputtering	Balasubramanian Sundarapandian	Contributed talk (15 min.)
352	Impact of AlN Buffer Layer Growth on the Quality of Mo(110) Thin Films for Acoustic Resonator Applications	Tamara Terzic	Contributed talk (15 min.)

M33 - Particle Beams for Material Modification and Analysis

M33 – Session 1 (Wed 23, 16:00-18:00, Chair: Constance Toulouse)			
ID	Title	Speaker	Type
360	New aspects for nanoscale material evolutions under focused beams.	Stéphane Guillous	Invited talk (30 min.)
714	Functionalising 2D materials with ultra-low energy ions	Harriet Åhlgren	Invited talk (30 min.)
592	Development of a setup for in situ preparation, introduction, and analysis of metallenes	Barbara Maria Mayer	Contributed talk (15 min.)
193	Ion Beam Implantation of Y-Zr-O Ions at 500 °C on FeCr-Based ODS Steel: Influence of Surface Preparation Methods on Precipitate Size, Distribution, Nucleation Mechanisms, and Crystallographic Evolution Revealed by Advanced TEM (TEM, HAADF STEM/EDS) for Nuclear Structural Materials	MANOJ KUMAR RAJBHAR	Contributed talk (15 min.)
288	Vacuum compatible printed circuit board anodes for particle detection with electron multiplier devices	Michael Kendler	Contributed talk (15 min.)
456	Investigating the Formation of Carbon Nanomembranes (CNMs) with Single and Double Electron Spectroscopy	Felix Blödnorn	Contributed talk (15 min.)
626	Low-Energy Electron Emission from Layered Materials	Anna Niggas	Contributed talk (15 min.)

M33 – Session 2 (Thu 24, 16:00-18:00, Chair: Anna Niggas)			
ID	Title	Speaker	Type
500	Atom and ion irradiation of graphene: disentangling elastic from inelastic scattering and the role of phonons	Toma Susi	Invited talk (30 min.)
218	Slow highly charged ions as a tool for tailoring strongly correlated quantum materials	Richard Wilhelm	Invited talk (30 min.)
368	Revealing charge fractions in LEIS from comparison to scattering-event-resolved simulations	Johannes Brötzner	Contributed talk (15 min.)
349	Picosecond Laser-Stimulated Ion Pulses from Tungsten Nanotips for Time-Resolved Low-Energy Ion-Scattering	Alexander Redl	Contributed talk (15 min.)
147	Atomic-Scale Characterization of Point Defects in Complex Oxides	Elena Martina Unterleutner	Contributed talk (15 min.)
257	Temperature distribution profile in metal surfaces irradiated by slow highly charged ions	Milena Majkić	Contributed talk (15 min.)

M33 – Session 3 (Fri 25, 10:30-12:30, Chair: Denise Erb)			
ID	Title	Speaker	Type
417	Non-Equilibrium Pattern Formation on Surfaces under Ion Beam Irradiation	Stefan Facsko	Invited talk (30 min.)
634	Learning Predictive Dynamics of Ion-Irradiated Surfaces from Sparse Data	Miguel Sequeira	Invited talk (30 min.)
551	The role of defects in ion induced β -Ga ₂ O ₃ to γ -Ga ₂ O ₃ conversion	Gregor Hlawacek	Contributed talk (15 min.)
524	Ion Beam Shaping of Catalytic Nanoparticles	Sophie Wrathall	Contributed talk (15 min.)
129	Defect engineering for oxide thin films by ion irradiation	Shengqiang Zhou	Contributed talk (15 min.)
132	Accessing negative pressure states for functional property tuning through strain engineering by helium implantation	Constance Toulouse	Contributed talk (15 min.)

M33 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
194 P074	Ag-Ion Irradiation Induced Micro rod formation in MoO ₃ for Advanced Field Emission Application	Manoj Kumar Rajbhar	Poster

M34 - Soft Meets Hard – Interfaces and Interactions

M34 – Session 1 (Wed 23, 16:00-18:00, Chair: Helga Lichtenegger)			
ID	Title	Speaker	Type
76	Multifunctional 2D Hybrid Nanomaterials for Bio- and Theranostic Applications	Cristina Satriano	Invited talk (30 min.)
259	Abstraction and technical principle transfer of plant tendrils to robotic grippers	Gabriel B. Fuchs	Contributed talk (15 min.)
346	Modeling the interface of graphene-based nanopores, biomolecules, and solvent	Maria Fyta	Contributed talk (15 min.)
353	Characterization of the osteocyte lacuno-canalicular network in human bone	Markus Hartmann	Contributed talk (15 min.)
696	Structural analysis of biological materials using Energy Dispersive Laue Diffraction	Arno Frank	Contributed talk (15 min.)

M34 – Session 2 (Tue 22, 16:00-18:00, Chair: Oskar Paris)			
ID	Title	Speaker	Type
138	Nature's Blueprint: Water-Enabled Functionalities in Hierarchically Porous Solids	Patrick Huber	Invited talk (30 min.)
134	Probing Interfacial Structure and Collective Dynamics under Applied Potential with THz Spectroscopy	Nina Strasser	Contributed talk (15 min.)
183	How Do Aqueous Supercapacitors Capture CO ₂ ? Establishing a Mechanistic Understanding	Malina Seyffertitz	Contributed talk (15 min.)
416	Operando Synchrotron Analysis of Capacitive Water Desalination Electrodes	Max Rauscher	Contributed talk (15 min.)
341	Interactions At Carbon–Electrolyte Interfaces In Aqueous Organic Redox Flow Batteries	Ahmad Alem	Contributed talk (15 min.)

M35 - Lipids, Surfactants and Polyelectrolytes

M35 – Session 1 (Mon 21, 16:00-18:00)			
ID	Title	Speaker	Type
803	Studying the in-plane structure of non-crystalline lipid layers with X-ray scattering techniques and molecular simulations	Emanuel Schneck	Invited talk (30 min.)
804	Disorder to Order: Streamlining Biomolecule Simulation Re-Use with FAIR NMRLipids database	Markus Miettinen	Invited talk (30 min.)
277	2D Network of PDMS and PEO-PPO-PEO at the air-water interface	Ellen Backus	Contributed talk (15 min.)
802	NLP toxins form transient pores in plant cell membranes	Jure Derganc	Contributed talk (15 min.)
564	Rhamnolipid Segregation in Mixed Monolayer Membranes Probed by Contrast-Variation SANS	Florian Trummer	Contributed talk (15 min.)
704	Influence of headgroup chemistry and sterols on in-plane structural correlations of fluid lipid monolayers	Konrad Weber	Contributed talk (15 min.)

M35 – Poster session (PS1 Mon21-Tue22)			
ID	Title	Presenter	Type
190 P025	Coupling of membrane asymmetry to the function of an integral membrane enzyme	Shalini Mishra	Poster
196 P026	Effect of an Integral Membrane Enzyme on the Structure of Asymmetric Lipid Bilayers	Shahrazad Dabironezare	Poster
274 P027	Surfactant Adsorption at Interface: An Atomistic Free Energy Approach	Vid Pograjc	Poster
317 P028	Probing hydrophobic mismatch-mediated protein-protein interactions by single-molecule FRET	Michael Kaltenecker	Poster
521 P029	Surfactant adsorption at the contact line of water nanodroplets	Fabio Staniscia	Poster
724 P030	Ion-tunable DNA Oligo-Catenanes with Mechanical Heterogeneity	Terpsichori Alexiou	Poster

M36 - Physics of Cellulose-based Materials

M36 – Session 1 (Fri 25, 10:30-12:30, Chairs: Karin Zojer, Eduardo Machado, Robert Schennach)			
ID	Title	Speaker	Type
144	Unraveling Overlapping Sorption and Release Dynamics in Paper: A Multi-Process Kinetic Perspective	Alexandra Serebrennikova	Invited talk (30 min.)
419	Influence of Alkali Counterions on the Refractive Index of Sulfated Cellulose Nanocrystals	Maximilian Fuchs	Contributed talk (15 min.)
532	Combined modelling and scattering studies on cellulose microfibril structures and their water interactions	Antti Paajanen	Invited talk (30 min.)
778	Fibre Geometry Shapes Pore Architecture: Micro-CT and SNOW-Based Analysis of Cellulose Absorbent Materials	Thomas Harter	Contributed talk (15 min.)
689	A rate-dependent finite-strain model of flax fibres with plasticity-induced evolution of orthotropy	Manfred H. Ulz	Invited talk (30 min.)
779	Sheet Densification and Fiber Bonding as Predictors of Mechanosorptive Creep in Corrugating-Medium Pulps	Akseli Laatikainen	Contributed talk (15 min.)

M37 - Emergent Behavior in Soft and Living Matter

M37 – Session 1 (Fri 25, 10:30-12:30, Chair: Sebastian Fürthauer) Active Matter: Filaments Motility & Living Systems			
ID	Title	Speaker	Type
80	Embryonic Origami: The forces driving human gastrulation	Diana Pinheiro	Invited talk (30 min.)
133	Phase Separating Nucleator in a Self Straining Active Filament Network	Jakob Schindelwig	Contributed talk (15 min.)
201	Entropic, Active, and Frictional Forces in Cytoskeletal Crosslinking	Cedrik Barutel	Contributed talk (15 min.)
641	Building a treadmilling filament from the bottom up	Marija Krstic	Contributed talk (15 min.)
124	Traveling Wave Dynamics of Microtubule Bed in Drosophila Oocytes	Alexandra (Olenka) Jain	Contributed talk (15 min.)
629	Mortal vs immortal filaments: propelled vs growing active matter	Juraj Majek	Contributed talk (15 min.)
588	Training of an Intelligent Triangular Microswimmer Using Genetic Algorithms	Ruma Maity	Contributed talk (15 min.)

M37 – Session 2 (Wed 23, 10:30-12:30, Chair: Christos Likos) Active Systems Polymers & Statistical Physics			
ID	Title	Speaker	Type
135	Tension-based models of epithelial tissues	Primož Ziherl	Invited talk (30 min.)
666	Adapt & Evolve: How local adaptivity governs global cell behaviour	Michael Wassermair	Contributed talk (15 min.)
195	How inhomogeneous activity affects the behaviour of active polymers	Emanuele Locatelli	Contributed talk (15 min.)
478	Interplay of activity and topology in active polymers	Davide Breoni	Contributed talk (15 min.)
271	Gradient-based optimization of kinetics to enable the design of active multistable systems	Maximilian Lechner	Contributed talk (15 min.)
483	Universal Features of a Microscopic Information Engine in Equilibrium	Remi Goerlich	Contributed talk (15 min.)
528	The electrostatic nature of protein pair potentials	Anze Bozic	Contributed talk (15 min.)

M37 – Session 3 (Thu 24, 10:30-12:30, Chair: Emanuela Bianchi) Soft Matter: Self-Assembly Patchy Interactions & Coarse-Grained Modeling			
ID	Title	Speaker	Type
279	The role of patchy interactions in protein self-assembly and the structural and dynamic properties of high concentration protein solutions	Peter Schurtenberger	Invited talk (30 min.)
198	Extremely coarse-grained modeling of multimeric G-quadruplexes	Cristiano De Michele	Contributed talk (15 min.)
712	Intercalation and stacking of ligands into patchy polymers	Flavio Scipione	Contributed talk (15 min.)
320	Steering tetrahedral patchy particles into cubic diamond via external fields	Lukasz Baran	Contributed talk (15 min.)
745	Effective interaction between two charged Janus colloids in an asymmetric ionic solution	Natasa Adzic	Contributed talk (15 min.)
756	Geometric principles for the design of self-assembling flexible subunits	Botond Tyukodi	Contributed talk (15 min.)

M37 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
70 P075	Emergent Interactions in Active Droplets- Non Reciprocal Interaction In Liquid Crystal Droplets	Nihal Ibrahim P P	Poster
71 P076	From LRO to Disorder via QLRO in Spatially Inhomogeneous Polar Flock	Anish Kumar	Poster
406 P077	Active Taylor Dispersion of E. coli: Effects of Chirality and Time-Periodic Flow in Microchannels	Stephan Hufnagl	Poster
741 P078	Distinct filament kinetics, unified defect dynamics in active nematics	Kseniia Petukhova	Poster

M38 - Astronomy and Astrophysics across Austria

M38 – Session 1 (Thu 24, 10:30-12:30)			
ID	Title	Speaker	Type
258	Astrophysical Research at the Universität Innsbruck highlighting pre-main sequence asteroseismology	Konstanze Zwintz	Invited talk (25 min.)
222	Gravitational-wave and electromagnetic signatures of binary black holes with circumbinary gas	Zoltan Haiman	Invited talk (25 min.)
168	Connecting solar and in-situ properties of coronal mass ejections	Manuela Temmer	Contributed talk (12min.)
247	Magnetic Topology and Loop Statistics in Observed Coronal Holes Using Potential Field Modeling	Manuela Temmer	Contributed talk (12 min.)
217	Probing the solar corona with the Solar Orbiter/Metis coronagraph: from instrumentation to CME diagnostics	Yara De Leo	Contributed talk (12 min.)
248	Spectral signatures from faculae in line-by-line RV	Sowmya Krishnamurthy	Contributed talk (12 min.)
376	Conditioning of the solar corona by large flares	Julia Thalmann	Contributed talk (12 min.)
318	Coronal dimmings and their relevance for solar and stellar coronal mass ejections	Astrid Veronig	Contributed talk (12 min.)

M38 – Session 2 (Thu 24, 16:00-18:00)			
ID	Title	Speaker	Type
235	Climate regimes on extrasolar planets	Christiane Helling	Invited talk (25 min.)
391	Protoplanetary Disks: From Star Formation to Planetary Systems	Kundan Kadam	Contributed talk (12min.)
390	Models of heating and diffusive processes in the solar corona	Philippe Bourdin	Contributed talk (12min.)
761	Evolution of Galaxy Scaling Relations	Bodo Ziegler	Invited talk (25 min.)
702	A high precision mass measurement of the central black hole in the massive elliptical galaxy NGC 2513 with ALMA molecular gas dynamics	Shelley-Anne Harrisberg	Contributed talk (12 min.)
667	Systematic Search for Local Little Red Dots in DESI DR1	Kevin Park	Contributed talk (12 min.)
44	Geodesics v.s. q-Desics: On the Motion in Quantum-Gravitational Background	Benjamin Koch	Contributed talk (12 min.)

M39 - Next Generation Gravitational Wave Observations

M39 – Session 1 (Mon 21, 10:30-12:30, Chair: Axel Maas)			
ID	Title	Speaker	Type
646	Einstein Telescope, pushing the outer limits of gravitational waves detection	Angelique Lartaux	Invited talk (30 min.)
656	The Einstein Telescope: challenges and opportunities of a third-generation detector	Filippo Santoliquido	Invited talk (30 min.)
651	Exploring fundamental physics with Einstein Telescope	Francesco Crescimbeni	Invited talk (20 min.)
765	Probing intermediate-mass black hole assembly in star clusters with gravitational waves	Lavinia Paiella	Invited talk (20 min.)
	Discussion		(15 min.)

M39 – Session 2 (Mon 21, 16:00-18:00, Chair: Ulyana Dupletsa)			
ID	Title	Speaker	Type
665	Gravitational waves as a probe of stellar and galaxy evolution in the next-generation detector era	Martyna Chruslinska	Invited talk (20 min.)
679	Why are stellar models overestimating binary black hole mergers?	Cecilia Sgalletta	Contributed talk (20 min.)
375	Geon Propagator in Causal Dynamical Triangulations	Johannes Anzengruber	Contributed talk (20 min.)
673	Impact of quantum gravity on the UV sensitivity of extremal black holes	Francesco Ferrarin	Invited talk (20 min.)
	Discussion		(40 min.)

M40 - Phenomenology and Novel Observables at Future Colliders

M40 – Session 1 (Wed 23, 16:00-18:00)			
ID	Title	Speaker	Type
555	Getting the most from the Higgs boson	Freya Blekman	Invited talk (30 min.)
554	Novel computational methods for the interpretation of collision data	Michael Spannowsky	Invited talk (30 min.)
767	Simulation of High Energy Physics at Future Colliders	Simon Plätzer	Contributed talk (20 min.)
733	Subleading Higgs effects at lepton colliders	Duifje van Egmond	Contributed talk (20 min.)
49	FMS on the lattice -- the structure of asymptotic states in weak physics	Georg Wieland	Contributed talk (20 min.)

M41 - Hybrid Intelligence for the Quantum Era

M41 – Session 1 (Fri 25, 10:30-12:30)			
ID	Title	Speaker	Type
806	Emerging topics in neuromorphic photonic systems	Sina Saravi	Invited talk (30 min.)
807	Hybrid nanoprinted neural networks: From passive optical inference to engineered photonic computing	Elena Goi	Invited talk (30 min.)

M42 - Advances in Magnonics

M42 – Session 1 (Thu 24, 10:30-12:30) Magnonic Crystals, Nanostructures & Collective Phenomena, Chair: Dieter Süss			
ID	Title	Speaker	Type
173	Dancing Magnets: Reconfigurable Spin Dynamics in Artificial Spin Lattices	Benjamin Jungfleisch	Invited talk (30 min.)
228	Hybrid nanostructures for on-chip excitation of ultrashort wavelength magnons	Dirk Grundler	Invited talk (30 min.)
238	Perspectives on inverse-design magnonics	Franz Vilsmeier	Invited talk (30 min.)
685	Magnon Kerr effect in ferrimagnetic thin films	Davit Petrosyan	Contributed talk (15 min.)
337	Nanoscale YIG Magnonic Crystals: One- and Two-Dimensional Systems	Khrystyna Levchenko	Contributed talk (15 min.)
589	Magnon quantum geometry in one-dimensional chiral magnets	Sidhartha Chatterjee	Contributed talk (15 min.)

M42 – Session 2 (Thu 24, 16:00-18:00) Quantum Magnonics, Cryogenic & Strong-Coupling Phenomena, Chair: Andrii Chumak			
ID	Title	Speaker	Type
721	Dynamical Stabilization of Inverted Magnetization and Antimagnons by Spin Injection in BiYIG	Pietro Gambardella	Invited talk (30 min.)
325	Identifying Loss Contributions in Spin-Wave Transducers	Florian Bruckner	Invited talk (30 min.)
377	Three-Dimensional Magnonics: From Coherent Excitation to Transport Perspectives	Huixin Guo	Contributed talk (15 min.)
669	Advances in micro-BLS: forward volume spin waves and polarization-dependent measurements	Krzysztof Szulc	Contributed talk (15 min.)
338	Ultralong-Living Magnons in the Quantum Limit	Rostyslav Serha	Contributed talk (15 min.)
732	Strong magnon-spin coupling and size effects on Van-der-Waals antiferromagnet CrSBr	David Garcia Pons	Contributed talk (15 min.)

M42 – Session 3 (Fri 25, 10:30-12:30) Spin-Wave Devices, Transducers & Inverse Design, Chair: Benjamin Jungfleisch			
ID	Title	Speaker	Type
799	Patterning two-dimensional gradients in structural and magnetic properties for spintronics and magnonics applications	Ales Hrabec	Invited talk (30 min.)
296	Temperature dependence of volume and interface contributions to the magnetic damping of Permalloy thin films	Andreas Ney	Invited talk (30 min.)
715	Probing Spin-wave Nonreciprocity in Ferromagnet/Superconductor Hybrid Structures	Jan Klima	Contributed talk (15 min.)
394	Improving the efficiency of antiferromagnetic upconversion	Verena Brehm	Contributed talk (15 min.)
145	Low Insertion Losses Microscale Spin-wave RF Devices	Kristyna Davidkova	Contributed talk (15 min.)
403	Inverse-design of linear and nonlinear magnonic devices using level-set topology optimization	Andrey Voronov	Contributed talk (15 min.)

M42 – Poster session (PS2 Wed23-Fri25)			
ID	Title	Presenter	Type
385 P079	Spin-Wave Transport through S-Shaped Ga:YIG Nanowaveguides	Hannah Arnfelser	Poster
480 P080	Optimization of Spin-Wave Transducers via Cross-Validated Simulation, Analytical, and Experimental Methods	Iason-Konstantinos Douveas	Poster
530 P081	Inverse Design of Coplanar Waveguide Transducers for Directional Spin-Wave Beam Excitation	Fabian Majcen	Poster
751 P082	Coherent Microwave Driving of Domain Wall Depinning in a Ferrimagnetic Garnet	Hanchen Wang	Poster