Time	Erzherzog Johann Auditorium
09:00 – 09:30	9:00-9:45 - **Katharina Franke** Building and investigating magnetic adatom chains on superconductors atom by atom
09:45 – 10:15	9:45-10:30 - **Christof Gattringer** Quantum Field Theory with Worldlines and Worldsheets
10:30	Coffee & Tea
10:45 – 12:00	10:45-12:00 - **Prize Award Celebration Section**
12:00 – 13:00	Lunch
13:00 – 14:00	13:00-14:00 - **General Assembly of ÖPG Members**

Time	Erzherzog Johann Auditorium	HS Raiffeisen	HS Physikalische Chemie	HS Kuppelwieser	HS Miller von Hauenfels
14:00	OGD III *Chair: Christian Teichert* 14:00-14:30 - **Wolfgang E. Ernst** Phase Transitions and Alloying of Mixed-Metallic Nanoparticles	COND III *Chair: TBA* 14:00-14:15 - **Gregor Hlawacek** On Demand Spatially Controlled Fabrication of Single Photon Emitters in Si	FAKT I *Chair: D. Samitz & S. Schwanda* 14:00-14:15 - **Julia Thaler** Cosmic-ray propagation under consideration of a spatially resolved source distribution	LHS I *Chair: Alexander Strahl* 14:00-14:45 - Preisträgervortrag des Sexl-Preisträgers 2022 **Martin Apolin** Wie viele Atome von Einstein befinden sich in uns? - Plädoyer für einen lustvollen und sinnerfüllten Physik-Unterricht	MBU *Chair: Rainer Leitgeb* 14:00-14:15 - **Richard W. van Nieuwenhoven** Antibacterial surfaces inspired from nanopillars on cicada wings
14:15		14:15-14:30 - **Florian Kappe** Red-detuned Excitation of a Quantum Dot	14:15-14:30 - **Daniel Samitz** Low-mass dielectron measurements in pp, p-Pb and Pb-Pb collisions with ALICE at the LHC		14:15-14:30 - **Borislav Hinkov** Next generation of liquid sensing based on monolithic mid-IR sensors for real-time reaction monitoring
14:30	14:30-14:45 - **Oliver T. Hofmann** Obtaining Design Principles and Processing Conditions with Machine Learning	14:30-14:45 - **R. Meisels** Simulation of Bragg mirrors for the extreme ultraviolet (EUV)	14:30-14:45 - **Christoph Schwanda** Determination of the CKM matrix element Vcb from the Belle II data		14:30-14:45 - **Maximilian Ritter** (Electro-)Luminescent Wood: Design, Assembly and Applications
14:45	14:45-15:00 - **Margareta Wagner** Physisorption of a small aromatic hydrocarbon: Benzene on In_2O_3(111)	14:45-15:00 - **Georg Marschick** Substrate-emitting, continuous wave interband cascade lasers in concentric, double ring arrangement	14:45-15:00 - **Andreas Wiederin** Separation of U and Np Isobars by ILIAMS	14:45-15:00 - **Ana Daldon** More physics for all: actions by the mu-seum world to support the choice of study-ing physics for less represented groups in the field, such as women's groups.	14:45-15:00 - **Karolina Peter** Using ESRF "nano-beam" for Investigating Spider Silks Ultrastructure
15:00	15:00-15:15 - **Borna Pielic** Tuning the vdW interaction between MoS_2 and graphene by self-intercalation	15:00-15:15 - **Andreas Windischhofer** Unveiling absorption mechanisms in interband cascade lasers	15:00-15:15 - **Oscar Marchhart** Developments towards an advanced radiofrequency quadrupole for AMS	15:00-15:30 - **Preisträgervorträge der VWA-Preisträgerinnen und -Preisträger der ÖPG 2022** Vorträge 1-3 10 Minuten pro Preisträger:in	15:00-15:30 - Mitgliederversammulung des FA MBU
15:15	15:15-15:30 - **Florian Lackner** Synthesis and investigation of sub-10 nm metal-semiconductor particles with core-shell and core-multi-shell structure	15:15-15:30 - **Moritz Brehm** Realization of double heterostructures in group-IV light-emitting diodes for room-temperature applications	15:15-15:30 - **Daniel Baumgartner** Simulating space charge effects inside the ILIAMS ion cooler		
15:30 – 16:00	Coffee & Tea				
16:00	OGD IV *Chair: Giada Francesci* 16:00-16:15 - **Katharina Burgholzer** Oxidized MoS_2: the path to memristor-based memories	COND IV *Chair: TBA* 16:00-16:15 - **Mikołaj Piotrowski** Flip-chip integration of mid-infrared lab-on-a-chip for gas sensing	FAKT II *Chair: Axel Mass* 16:00-16:30 - **Reinhard Alkofer** Hadron properties from QCD bound state equations: An update	LHS II 16:00-16:30 - **Preisträgervorträge der VWA-Preisträgerinnen und -Preisträger der ÖPG 2022** Vorträge 4-6 10 Minuten pro Preisträger:in	AMP *Chair: Wolfgang Ernst* 16:00-16:15 - **Andreas W. Hauser** Quantum confinement in carbon structures
16:15	16:15-16:30 - **Muhammad Awais Aslam** Ferroelectric Graphene Nanoribbons with a Gate Dependent Transport Gap	16:15-16:30 - **Mauro David** Functionalization of mid-IR plasmonic waveguides for novel lab-on-a-chip biosensors			16:15-16:30 - **Lilian Nowak** In-beam measurements of the hydrogen hyperfine splitting to constrain SME coefficients
16:30	16:30-16:45 - **Markus Alfreider** Understanding interface fracture in a plastically deforming WTi-Cu system	16:30-16:45 - **Petra Christöfl** Micromechanical Investigation of Photovoltaic Backsheet Materials	16:30-16:45 - **Philipp Schreiner** A manifestly gauge-invariant treatment of the MSSM	16:30-16:45 - **Vorstellung des IYPT Tournament**	16:30-16:45 - **Johannes Krondorfer** Nuclear quadrupole resonance in molecularly confined quantum systems
16:45	16:45-17:00 - **Elena Arigliani** Low-loss polyethylene-based plasmonics for mid-infrared photonic integrated circuits	16:45-17:00 - **Sumea Klokic** Guest-driven structural dynamics in photo-responsive MOF films	16:45-17:00 - **Fabian Veider** Subleading effects for future lepton colliders	16:45-17:00 - **Vorstellung der Physikolympiade**	16:45-17:00 - **Barbara Lehner** Route to highly entangled photons from QDs operated at elevated temperatures
17:00	17:00-17:15 - **Rajarshi Roy** Magnetic graphene quantum dots	17:00-17:15 - **Lawrence Whitmore** 3D printing of sample preparation tools for reduced carbon footprint	17:00-17:15 - **Elizabeth Dobson** Possible discrepancies in the spectrum of GUT models		17:00-17:15 - **Christian Binder** An extension of Eyring Theory to problems of molecular diffusion
17:15	17:15-17:30 - **Tijana Tomasevic-Ilic** Langmuir-Blodgett films from liquid phase exfoliated 2D materials	17:15-17:30 - **Stefan Kain** Production and characterization of novel bio-based filaments with natural fibrous fillers for FDM (Fused Deposition Modeling) 3D printing	17:15-17:30 - **Georg Wieland** Aspects of gauge theories with many massive flavors		17:15-17:30 - **Julia Freund** Quantification of entanglement from quantum dots
17:30 – 19:00	17:30-19:00 - **Poster Session** including Reception by the Mayor of Leoben				

Time	Erzherzog Johann Auditorium
19:00 – 20:30	19:00-20:30 - **Public Evening Lecture (in German) by Prof. Hans Joachim Schellnhuber** Das Klima, die Freiheit und die Wissenschaft