

Monday	
8:00-8:50	registration
8:50-9:00	opening. Chair: C.Gadermaier
9:00-9:30	Doron Naveh Strain-Phonon Cooling Effect in hBN Quantum Emitters
9:30-10:00	Aleksandar Matkovic Magnetism in Two Dimensional Phyllosilicates
10:00-10:15	Shun Feng Hybrid trion transistor based on a bilayer semiconductor
10:15-10:30	Natalia Zawadzka Unrevealing Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> density of states in electroluminescence of WSe <sub>2</sub> light emitting diode
10:30-10:45	Benjamin Mayer Surface acoustic wave-controlled photocurrent in few-layer WSe <sub>2</sub>
10:45-11:15	coffee break
	Chair: A. Matkovic
11:15-11:45	Ahmad Avsar Gate-Tunable Induced Magnetism in a 2D Semiconductor
11:45-12:15	Tobias Korn Ferroelectric control of (interlayer) excitons
12:15-12:30	Katarzyna Olkowska-Pucko Extremely high excitonic g-factors in 2D crystals by alloy-induced admixing of band states
12:30-12:45	Ilias-Panagiotis Oikonomou Quantum Defects as a Lever for 2D Magnetism beyond monolayer PtSe <sub>2</sub>
12:45-13:00	Sandip Ghosh Measuring exciton Landé g-factor with low magnetic fields and evidence for an inter-layer B-like exciton in bulk 2H-MoS <sub>2</sub>
13:00-14:30	lunch
	Chair: M. Reutzler
14:30-15:00	C. Trovatiello Ultracompact nonlinear platforms based on van der Waals semiconductors for classical and quantum states of light
15:00-15:15	Yilyu Guo Spin-Selective Charge Flow Drives Ultrafast Magnetic Transitions in Type-II Bipolar Magnetic Heterostructures
15:15-15:30	Maciej Śmiertka Coexistence of magnetic Frenkel and Wannier-Mott excitons in a 2D semiconductor CrSBr
15:30-15:45	Roberto Rosati Exciton trapping and unidirectional drift in 2D lateral heterostructures

15:45-16:00	Charles J. Sayers Coherent Phonon Spectroscopy of Monolayer TMDs and van der Waals Heterostructures
16:00-16:15	Floriana Morabito Dynamics of Methyl-Germanane from Liquid Phase Exfoliation
16:15-16:45	coffee break
	Chair: A. Chernikov
16:45-17:45	shotgun poster presentations
17:45-20:00	poster session I
Tuesday	
	Chair: D. Naveh
9:00-9:30	Efrat Lifschitz Change in Magnetic Order in NiPS3 Single Crystals Induced by a Molecular Intercalation
9:30-10:00	Goki Eda Point-like photovoltaic junctions in doped homobilayer
10:00-10:15	Christian Martella Non-volatile resistive switching in 2D Tellurium
10:15-10:30	Luca Anzi Versatile Plasma Doping Strategy for High-Quality 2D Material Diodes and Circuits
10:30-10:45	Nuria Jiménez Arévalo Optoelectronic memories based on large area exfoliated MoS2 flakes on ITO
10:45-11:15	coffee break
	Chair: B. Visic
11:15-11:45	A. Kuc Computational Guide to Optimize Electric Conductance in MoS2 Films
11:45-12:15	J. Maultzsch Optical spectroscopy of defects in 2D materials
12:15-12:30	Joyce B. Matsoso Mo2TiC2 MXenes for Electrocatalytic NO3-1 Reduction to Ammonia
12:30-12:45	Noya Ruth Itzhak Enantioselective Solid-State Synthesis of Guided Chiral Nanowires
12:45-13:00	Nirman Chakraborty Operando methods towards understanding hybridization routes in oxygen reduction reactions over 2D and 3D surfaces
13:00-14:30	lunch
	Chair: G. Eda
14:30-15:00	S. Mitra (Physical Review Letters) tba

15:00-15:15	Hongde Yu Metal-Free Magnetism in Organic 2D Crystals
15:15-15:30	Igor Antoniazzi Magneto-excitonic characteristics of the anisotropic CrSBr antiferromagnet
15:30-15:45	Andreas Beer Proximity-induced Exchange Interaction And Prolonged Valley Lifetime In MoSe <sub>2</sub> /CrSBr Van-der-Waals Heterostructure With Orthogonal Spin Texture
15:45-16:00	Shamik Chakraborty Molecular Control of Spin Interactions in Two-Dimensional CrI <sub>3</sub> with Surface-Bound N-Heterocyclic Carbenes
16:00-16:15	Konrad Widaj Electron and Hole g-factor Anisotropy in Two-dimensional Layered Perovskites
16:15-16:45	coffee break
	Chair: Y. Xie
16:45-17:45	shotgun poster presentations
17:45-20:00	poster session II
Wednesday	Chair: J. Maultzsch
9:00-9:30	G. Cerullo Ultrafast spin-valley dynamics in single-layer transition metal dichalcogenides
9:30-10:00	A. Chernikov Interacting and mobile excitons in two-dimensional semiconductors
10:00-10:15	Florentine Friedrich Universal And Ultrafast Probe Of Broken Time-Reversal Symmetry via Third Harmonic Kerr Rotation
10:15-10:30	Sebastian Klimmer Signature of Ultrafast Coherent Bandgap Modulation in Nonlinear Optics
10:30-10:45	Alain Dijkstra Ten-valley excitonic complexes in charge-tunable monolayer WSe <sub>2</sub>
10:45-11:15	coffee break
	Chair: G. Cerullo
11:15-11:45	Paulina Plochocka Excitonic landscape in van der Waals heterostructures
11:45-12:15	Maria Antonietta Loi Low dimensional metal halides: optical and electronic properties of an emerging 2D semiconductor
12:15-12:30	Mateusz Dyksik Steric Engineering of Exciton Fine Structure in 2D Perovskites

12:30-12:45	Carlo S. Casari 2D Carbon Materials Beyond Graphene: Graphdiyne-Like Networks Via On-Surface Synthesis
12:45-13:00	Tamir Forsht New Family of All-Metal-Core Two-Dimensional Materials
13:00-14:30	<b>lunch</b>
	free time
18:30-20:00	Leonardo da Vinci, Museum of Science and Technology
20:00-23:00	conference dinner
Thursday	
	Chair: C. Trovatiello
9:00-9:30	Moshe Ben Shalom Super Lubricant Arrays of Layered Polytypes: Internal Polarization, Elastic Coupling, and Switching Dynamics
9:30-10:00	Ursula Wurstbauer Optical signatures of inhomogeneities and moiré minibands in van der Waals bilayers
10:00-10:15	Thomas Brumme Theoretical insights on localized exciton emission and interfacial spin-orbit coupling in NiPS <sub>3</sub> /WSe <sub>2</sub> heterostructures
10:15-10:30	Tomasz Woźniak Magneto-optical properties of two-dimensional magnetic semiconductors and their heterostructures
10:30-10:45	Chinmay Kumar Mohanty Angular Resolved Raman Scattering in a Layered VOCl Antiferromagnet
10:45-11:15	<b>coffee break</b>
	Chair: A. Kuc
11:15-11:45	Alessandro Molle Atom-by-atom Configuring Two-Dimensional Xenon for Electronic, Optoelectronic, and Optical Devices
11:45-12:15	Bojana Visic Van der Waals nanotubes- from synthesis to applications
12:15-12:30	Sagnik Chatterjee Unrolling Anisotropy: Rolling Transition Metal Dichalcogenides For Polarized Light Control
12:30-12:45	Lena Yadgarov ZIF-8-templated ZnS/MoS <sub>2</sub> hollow heterostructures enabling whispering gallery modes for enhanced energy applications
12:45-13:00	Yarden Danieli  2D or Not 2D? Mixing Dimensions in MoS <sub>2</sub> Nanostructures
13:00-14:30	<b>lunch</b>

	Chair: T. Korn
14:30-15:00	Yong Xie Towards Full Autonomous Synthesis and Characterization of Two-dimensional Materials
15:00-15:15	Atikur Rahman Tuning 2D TMDs for Optoelectronics through Defect Engineering
15:15-15:30	Rico Friedrich Next Generation 2D Materials and Their Heterostructures by Data-driven Design
15:30-15:45	Ana Senkić Tungsten-Induced Modulation of Interlayer Coupling in CVD Grown MoS <sub>2</sub> Bilayers
15:45-16:00	Esteban Zamora Amo Scalable Fabrication of Anisotropic 2D Materials via Roll-toRoll Exfoliation
16:00-16:15	Ilaria Candio ImageS sponsor presentation
16:15-16:45	coffee break
	Chair: A. Genco
16:45-17:15	Alexander Hoegele Exciton, polariton, charge and spin lattices in moiré heterostructures
17:15-17:45	Saptarshi Das AI for 2D Materials and 2D Materials for AI
17:45-18:00	Edoardo Lopriore Electrically-Tunable Enhancement of Interlayer Exciton Dynamics Coupled with Monolithic Microcavities
18:00-18:15	Fang Wang Photodetectors for Weak Signals
18:15-18:30	Oliwia Janikowska Study of the coupling between optical and magnetic properties in the two-dimensional antiferromagnet CrSBr <sub>1-x</sub> Cl <sub>x</sub>
18:30-18:45	Andrew Pannone Hardware Acceleration of Reconfigurable Dendritic Computation
Friday	
	Chair: U. Wurstbauer
9:00-9:30	Marcel Reutzel Excitons in space and time – a femtosecond momentum microscopy study
9:30-10:00	Giancarlo Soavi Signatures of broken time reversal symmetry and Berry curvature in the nonlinear optical response of layered materials

10:00-10:15	Grzegorz Krasucki Doping Effect on the Brightening of Dark Excitons and Trions in a WSe <sub>2</sub> Monolayers
10:15-10:30	Lucas Lafeta Tip-enhancement Fourier-space nonlinear images of 2D Materials
10:30-10:45	Yigit Sozen Two-Dimensional Temporary Tattoo Electronics via Roll-to-Roll Exfoliation
	Chair: A. Hoegele
10:45-11:15	coffee break
11:15-11:45	Armando Genco Nonlinear interactions and ultrafast dynamics of hybridized interlayer excitons in semiconducting bilayers
11:45-12:15	Robert Kudrawiec Transition Metal Dichalcogenides on Optical Fibers Tips: Thermal Effects and Light Modulation
12:15-12:30	Sotirios Papadopoulos Van der Waals light sources and photodetectors based on energy transfer between tunneling electrons and excitons
12:30-12:45	Martin Gerlei Tuneable Optoelectronic Response In Flexible PtSe <sub>2</sub> Films
12:45-13:00	Sabrine Ayari Pioneering Terahertz Technology with 2D Materials: Extreme Optical Nonlinearities for Far-Infrared Photonics
13:00-13:05	closing
13:00-14:30	lunch