Poster Session 1 – Monday, October 20, 2025

Topic	Submitter	Title
MML-Matter	Alexandre Gumberidze	Precision tests of QED in the regime of extreme fields
MML-Matter	Anthony Ferté	Probing the attosecond dynamics of high-energy-radiation-induced collisional ionization cascades in condensed-phase samples
MML-Matter	Christina Bömer	X-ray parametric down-conversion reveals EUV-polariton
MML-Matter	Daniel Silvan Dolling	TiO2 for Virus Inactivation
MML-Matter	Dietrich Krebs	A nonlinear extension of crystallography - X-ray-optical wavemixing on valence charges
MML-Matter	Günter Brenner-Abild	FLASH: Beamlines, endstations and opportunites.
MML-Matter	Hend Shahed	Solvent-controlled spin crossover and aging in $[Fe(NQu)_3(NCS)_2]$
MML-Matter	Ivo Vinklárek	Hydration-Driven Photophysics: From Isolated Chromophores to Solvated Molecular Systems
MML-Matter	Keerthana Ravi	Photoelectron spectroscopy of the Mössbauer transition in ^{57}Fe
MML-Matter	Leon Merten Lohse	An X-ray interferometer on the nanometer scale
MML-Matter	Lukas Kau	Towards quantum logic spectroscopy of highly charged heavy ions for novel optical clocks
MML-Matter	Maximilian Kubullek	Tailored and Enhanced Isolated Attosecond Pulses in the Water-Window using a Parametric Waveform Synthesizer
MML-Matter	Mohammadebrahim Hajinaghitehrani	Magnetite Nanoparticles Supported by Oxide Surfaces
MML-Matter	Erik Månsson	Ultrafast dissociation dynamics of alkyl iodides induced by few-fs UV pulses
MML-Matter	Sang-Kil Son	Quantum-state-resolved X-ray multiphoton ionization dynamics
MML-Matter	Stephan Fritzsche	Atomic cascade computations for astro and plasma physics
MML-Matter	Tim Laarmann	Interferometry, ultrafast spectroscopy and nonlinear optics on extreme time and wavelength scales: From small quantum systems towards biofilms
MML-Matter	Wolfgang Quint	The ARTEMIS Experiment: g-factor measurement through precision spectroscopy of heavy highly charged ions
MML-Matter	Dawit Hailu	Solving the Near-field Phase Retrieval Problem Using Generative Deep Learning
MML-Matter	Jan-Christoph Deinert	Terahertz Harmonics for Materials Research

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Poster Session 1 – Monday, October 20, 2025

Topic	Submitter	Title
MML-Materials	Andrei Chumakov	Ferromagnetic Cellulose Nanocomposite for Coating and Filament Production toward Flexible Electronic Materials
MML-Materials	Artur Erbe	Transistors based on 1d- and 2d- materials for novel nanoelectronic applications
MML-Materials	Christoph Schlueter	HAXPES at PETRA III and IV: electronic structure, operando devices and in-situ catalysis
MML-Materials	Constantin Wansorra	Are calculated partial photoionization cross sections good enough for HAXPES applications?
MML-Materials	David Canelo Yubero	Residual stress mapping with conical slits
MML-Materials	Emmanuel Kentzinger	Inverse proximity effect in a ferromagnet-superconductor thin film heterostructure investigated by GISANS with polarization analysis
MML-Materials	Freya Husstedt	Slow magnetic quantum oscillations in the c-axis magnetoresistance of UTe2
MML-Materials	Hans-Christian Wille	PETRA III - Brilliant opportunities for Research in Matter, Materials and Live
MML-Materials	Jeremy Sourd	Acoustic signatures of the field-induced electronic-topological transitions in YbNi4P2
MML-Materials	Kai Schlage	Self-assembled magneto-resistive multilayer nanowires
MML-Materials	Kirill Povarov	Complex magnetic excitations in alternating ferro-antiferromagnetic chain compound Cu$_2$(OH)$_3$Br
MML-Materials	Lukas Bruckmeier	Ultrafast combined core and valence electron dynamics in 1T-TaS2
MML-Materials	Manuel Brinker	Electrochemo-Mechanical Actuation in Nanoporous Silicon
MML-Materials	Markus Scholz	Investigation of Quantum Materials at FEL
MML-Materials	Mauro Prasciolu	Multilayer Laue lenses at DESY
MML-Materials	Naufal Ismail Kreshnaviyanto	Towards diffraction-limited X-ray focusing: Correcting aberrations in high numerical aperture multilayer Laue lenses
MML-Materials	René Heller	Challenges and Current Developments in Modern Ion Beam Analysis at the HZDR Ion Beam Center
MML-Materials	Rolf Treusch, Markus Gühr	Unique Science Opportunities at the upgraded FLASH Facility
MML-Materials	Saba Alizadehfanaloo	Development of Operando Full-Field 2D and 3D XANES Imaging at Beamline P64, PETRA III
MML-Materials	Simon Bode	Laminography for 3D Characterization of Energy Storage Devices

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Poster Session 1 – Monday, October 20, 2025

Topic	Submitter	Title
MML-Materials	Steffen Tober	Experimental Possibilities at the in situ X-ray Diffraction and Imaging Beamline at PETRA III, DESY
MML-Materials	Svetoslav Stankov	Phonons in Epitaxial DySi$_2$: From the Bulk to Self-Organized Nanoislands and Nanowires
MML-Materials	Tino Gottschall	A materials library for cryogenic magnetocaloric cooling
MML-Materials	Yevheniia Smortsova	Using the VUV light at the P66 beamline at PETRA III as a tool for accessing the scintillation mechanisms and characterizing the defects in the wide-band gap insulators
MML-Life	Amit Kumar Samanta	Laser-induced alignment of nanoparticles and macromolecules: modeling and realization
MML-Life	Anne Creon	Statistical crystallography reveals an allosteric network in SARS-CoV-2 Mpro
MML-Life	Clement Tavakoli	Towards Serial Computed Tomography
MML-Life	Elias Hamann	X-ray Computed Laminography of Compression Fossils
MML-Life	Johanna Hakanpää	Macromolecular Crystallography beamline P11: unattended data collections and AI-assisted fragment evolution in rational drug design
MML-Life	Laila Benz	The F2X Facility: The Crystallographic Fragment Screening Platform at HZB
MML-Life	Maria Eleonora Temperini	IRIS Beamline: Bridging the Micro-Nano Divide
MML-Life	Jose Velazquez Garcia	Exploring the X-ray Induced Transition in a Rare Earth Metal-Organic Framework: Tb-CU-10
MML-Life	Pauline Pfeiffer	GAINING INSIGHTS INTO THE MORPHOLOGY, DEVELOPMENT AND BEHAVIOR OF PARASITOID WASPS USING SYNCHROTRON X-RAY IMAGING
MML-Life	Thomas van de Kamp	Digitization of Insect Morphological Biodiversity
MML-Life	Xiaoying Tan	AI-based Morphometric Analysis of Model Organisms

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Poster Session 2 – Tuesday, October 21, 2025

Topic	Submitter	Title
MML-Matter	Alexey Yakovlev	High average and peak power cryogenic Yb:YLF laser systems
MML-Matter	Atilay Ayasli	Controlled Molecules for chemical dynamics studies.
MML-Matter	Christina Papadopoulou	FLASH Beamline FL26: Unique opportunities with FEL & HHG
MML-Matter	Dennis Mayer	Investigating the Ultrafast Molecular Relaxation of 4-Thiouracil Using Time-Resolved X-Ray Photoelectron Spectroscopy
MML-Matter	Gerard Hinsley	Dynamic X-ray Coherent Diffraction Analysis: Bridging the Timescales Between Imaging and Photon Correlation Spectroscopy
MML-Matter	Günther Kassier	Pin Cathode RF gun setup for Ultrafast Electron Diffraction
MML-Matter	Hubertus Bromberger	Imaging fragmentation of ionized water dimer using Timpix detectors
MML-Matter	Kai-Fu Wong	Realtime observation of plasmon generated hot electrons
MML-Matter	Konstantin Mohr	HITHOR: Highly Ionized Trapped 229-Thorium - A New Paradigm Towards a Nuclear Clock
MML-Matter	Leonard Wegert	X-ray Talbot Interferometry for High-Energy Density Science
MML-Matter	Marvin Fischer	Ion stopping power experiments with the laser-driven LIGHT beamline
MML-Matter	Neetesh Singh	High power LMA based integrated photonics lasers and amplifiers
MML-Matter	Oleksandr Pylypovskyi	Design of frustration and artificial ferrotoroidicity in curvilinear nanomagnets
MML-Matter	Sabine Rockenstein	Ultrathin liquid flat jet system for attosecond spectroscopy of solvated molecules
MML-Matter	Sebastião Antunes	Calculation of effective pump fluence in X-ray pump - X-ray probe experiments
MML-Matter	Tobias Over-Winter	A Novel Compton Telescope for Polarimetry in the MeV Range
MML-Matter	Oliviero Cannelli	Core-resonant enhancement of impulsive lattice dynamics in trigonal tellurium
MML-Matter	Philipp Hesselbach	X-ray absorption spectroscopy of heavy-ion heated aluminum
MML-Materials	Andrei Anisimov	Nuclear spin polarization in 6H silicon carbide using spin-3/2 centers at room temperature
MML-Materials	Ashin Varghese Mathews	Engineering New Family of Color Centers in Silicon Carbide for Telecom Band

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Poster Session 2 – Tuesday, October 21, 2025

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MML-Materials	Anton Plech	Electron and phonon transport in metallic thin films
MML-Materials	Ayisha Suhana	Magnetic Field Imaging in a Quantum SiC Microscope
MML-Materials	Christopher Schröck	Swift heavy ion irradiation of bismuth nanowire networks pressurized in diamond anvil cells
MML-Materials	Daniel Hänschke	Correlative Diffraction Imaging of Dislocations in GaAs
MML-Materials	Dirk Hauschild	Local Electronic Structure of Porphyrins Probed with Soft X-Ray Spectroscopies
MML-Materials	Fernando García Martinez	Operando studies of heterogeneous catalysts at PETRA III
MML-Materials	Frieder Koch	The M-branch at the GSI UNILAC: Status and applications in astrochemistry
MML-Materials	Hlynur Gretarsson	Fingerprints of Unconventional Magnetism in Ruthenates
MML-Materials	Jose Velazquez Garcia	Unexpected Shielding Effect of the BF4- Counter Ions in the X-ray Absorption Spectrum in Crystals of a FeII Metallogrid Complex.
MML-Materials	Kilian Lenz	Magnetic patterning using Ne, Co, and Dy FIB
MML-Materials	Klaus Lieute	The Instrumentation of the Planned Neutron Source HBS-I at Forschungszentrum Jülich
MML-Materials	Lukas Madlindl	Fundamental Insights into the Structure and Transport of Nanoconfined Alcohol-Water Solutions in Porous Silicon
MML-Materials	Marc-André Nielsen	Influence of component geometry on residual stress in aluminium parts produced by laser powder bed fusion
MML-Materials	Mathias Hurst	Laminography for Damage Analysis in Alloy Sheets
MML-Materials	Miguel Trigueros Hevia	Surface and structural modifications in Bi nanowires induced by swift heavy ion irradiation
MML-Materials	Moritz Hoesch	Topological transitions and protection in Fe_3GeTe_2 van der Waals ferromagnetic thin flake
MML-Materials	Ralph Steininger	Compact X-ray Emission Spectrometer of the SUL-X Beamline Implications for Lanthanide and Actinide Research
MML-Materials	Ruslan Salikhov	Ultrafast Spin-Orbit Torques and Charge-to-Spin Interconversions Probed by Terahertz Fields
MML-Materials	Sagar Bisoyi	Lattice dynamics of ultrathin Fe films on GaAs(001)
MML-Materials	Stefan Mangold	Characterization of Li-ion batteries with XAFS
MML-Materials	Stephan Winnerl	Low energy dynamics in semiconductor nanostructures investigated at the free-electron laser FELBE
MML-Materials	Tim Lengler	FlexiSLM – A device for in-situ studies of laser powder bed fusion with X-rays

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Poster Session 2 – Tuesday, October 21, 2025

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MML-Materials	Yevhen Zabila	Flexible and printed magnetic field sensors
MML-Materials	Yogesh Pokhrel	Pulsed laser-induced gold microparticle fragmentation by thermal strain
MML-Materials	Anton Davydok	Scanning X-ray nanodiffraction with in-situ mechanical tests
MML-Life	Angelica Cecilia	HIKa – Hierarchical Imaging Karlsruhe: Near future and perspectives
MML-Life	Bjarne Klopprogge	Magnetoreception - understanding magnetic field induced dynamics in photoexcited proteins
MML-Life	Cristina Vasilita	Integrating Synchrotron Micro-CT & DNA Sequencing
MML-Life	Janes Odar	3D Atlas of the Early Development of Xenopus laevis
MML-Life	Martin Spiecker	Dose-efficient propagation-based X-ray phase contrast imaging at high and low resolution by Bragg crystal optics
MML-Life	Mansi Butola	Bragg Fourier ptychography for imaging strains in nano-crystals
MML-Life	Maria Eleonora Temperini	Exploring Biology with Nanoscale Infrared Spectroscopy at IRIS infrared beamline
MML-Life	Philipp Middendorf	Making Serial Crystallography easy to use in three challenging steps
MML-Life	Tomas Farago	Intensity Contrast Transfer Phase Retrieval
MML-Life	Virginia Apostolopoulou	Mathematically deriving loop mobility for single protein structures

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