



CPS Mini Symposium:
Materials properties at Interfaces and close to Surfaces: 2D
materials and far beyond

Organizers: Christian Wäckerlin and Andrin Doll

Monday, October 2nd, 2025, 14.00 - 17:00 | WBGB/019+020

Session 1: 2D materials with novel properties: single and stacked layers	
14:00 15' + 5' Q&A	Petr Kral <i>Emergent Quantum Phenomena in Layered Materials Group, LMU</i> Interplay between charge density wave order, anomalous Hall effect and superconductivity in 6R-TaS₂
14:20 15' + 5' Q&A	Miloš Baljžović <i>Molecular Nanoscience, LXN and Empa Dübendorf</i> On-surface synthesis of monolayer graphitic carbon-nitride
14:40 15' + 5' Q&A	Nicolai Taufertshöfer <i>Quantum Photon Science, LXN</i> Van der Waals devices for surface-sensitive experiments
15:00 15' + 5' Q&A	Sohel Shams Islam <i>Emergent Quantum Phenomena in Layered Materials Group, LMU</i> Pressure effect on 2H-NbSe₂, 4H-NbSe₂, 2H-NbS₂
15:20-15:40	<i>Break</i>
Session 2: Complexity unraveled by Photon Science	
15:40 15' + 5' Q&A	Zhijia Zhang <i>Spectroscopy of Quantum Materials, LSX</i> Coupling between orbital excitations and magnetism in van der Waals antiferromagnet CrPS₄ revealed by X-ray spectroscopy
16:00 15' + 5' Q&A	Suddhasattwa Mandal <i>SwissFEL Maloja, LSF</i> Investigating biomolecules at very low vibrational energies using X-ray photoemission spectroscopy
16:20 15' + 5' Q&A	Hankai Zhang <i>SwissFEL Maloja, LSF</i> Time dependent single nanoparticle investigations, structure and attosecond dynamics from soft x-ray scattering
16:40 15' + 5' Q&A	Loïc Bassement or Eloisa Manetti <i>SwissFEL Maloja, LSF</i> Water clusters of two to tens of molecules: Pump-probe X-ray absorption spectroscopy for tracking the inter- and intra molecular dynamics

Contact: christian.waeckerlin@psi.ch, andrin.doll@psi.ch