EMERGING 4D-STEM AND RELATED APPLICATIONS

Tuesday 31.10.2023, Institute of Scientific Instruments of the CAS
Královopolská 147, 612 00 Brno-Královo Pole

9:00–9:30	registration
9:30–9:40	introduction
9:40–10:40	Benedikt Haas, Department of Physics, Humboldt University of Berlin *"4D-STEM: Fundamentals, Developments and Applications"*
10:40–11:00	coffee break
11:00–11:30	Jani Kotakoski, Faculty of Physics, University of Vienna *"Combining atomic-resolution microscopy and tailoring of 2D materials"*
11:30–11:55	Ondřej Bačo, Thermo Fisher Scientific Brno *"4D STEM - from strain mapping to record resolution"*
11:55–12:20	Nithin Shankar, TESCAN, Brno *"Seamless 4D-STEM workflows using TESCAN TENSOR"*
12:30–13:30	lunch
13:30–14:10	Clemens Manger, Faculty of Physics, University of Vienna *"Data management in a unique UHV-system"*
14:10–14:35	Miroslav Šlouf, Institute of Macromolecular Chemistry of CAS, Prague *"4D-STEM/PNBD – changing an SEM to powder electron diffractometer"*
14:35–15:00	Radim Skoupý, Paul Scherrer Institute, Villigen *"Integrated light-4D-STEM: from fluorescence microscopy and sample thickness mapping to powder diffraction analysis"*
15:00–15:15	Ivo Kuběna, Institute of Physics of Materials of CAS, Brno *"4D-STEM in additive technology - visualization of residual stresses"*
15:15–15:45	coffee break
15:45–16:00	Zvonimír Jílek, Institute of Scientific Instruments of CAS, Brno *"Iterative ptychography on SEM via simulations"*
16:00–16:30	Andrea Konečná, CEITEC, Brno University of Technology, Brno *"Vibrational electron energy-loss spectroscopy in a scanning transmission electron microscope"*
16:30–17:00	Pavel Stejskal, AdvaScope, Brno *"From Analogue to Digital: AdvaScope's Fast and Noiseless Pixelated Detectors for Electron Microscopy"*
17:00–18:00	excursion in the EM labs of ISI CAS
from 18:00	dinner

click or scan for registration

REGISTRATION REQUIRED – deadline is 26.10.2023

For more information contact Vladislav Krzyzanek on krzyzanek@isibrno.cz

The workshop is organized with the support of the project „The Strategy AV21 Czech Academy of Sciences", the research program „Breakthrough Technologies for the Future – Sensing, Digitisation, Artificial Intelligence and Quantum Technologies".

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