

Monday 24th January 2022

The Swedish Materials Science beamline at PETRA III

This satellite meeting focusses on the in-line branch P21.2 of the Swedish Materials Science beamline at PETRA III which is dedicated to multi-modal materials characterization by high-energy synchrotron radiation. The status of the beamline will be presented and future developments will be discussed. Selected experimental case studies will be presented by users. A summary of activities at the P21.1 side-station will also be given. An activity report of the Center for X-rays in Swedish Materials Science (CeXS), the academic host of the SMS beamline, will be presented.

13:00-13:30: "Status and developments at the SMS in-line branch P21.2", U. Lienert (DESY)

User presentations

13:30-13:50: "Simultaneous SAXS and WAXS to investigate confined noble-metal nanostructures", G. Abbondanza (LU)

13:50-14:10: "In situ surface-sensitive investigation of multiple carbon phases on Fe(110) in Fischer-Tropsch synthesis", M. Shipilin (SU)

14:10-14:30: "Spatially resolved surface X-ray diffraction", J. Gustafson (LU)

14:30-14:50: "Usage of combined in situ SAXS/WAXS setup to understand decomposition and crystallization sequences in metallic glasses", N. Neuber (U. des Saarlandes)

14:50-15:10: "Residual stresses in laser-based powder bed fusion manufactured alloy 625", M. Fisk (MU, LU)

15:10-15:30: "On intragranular structure evolutions due to solid-state thermal cycling during metal additive manufacturing: an HRRSM study at P21.2", M. Upadhyay (Ecole Polytechnique)

Break

16:00-16:30: "Status and developments at the SMS side branch P21.1", M. von Zimmermann (DESY)

16:30-17:00: "Activities of the Center for X-rays in Swedish Materials Science (CeXS)", P. Hedström (KTH)

17:00-17:30: Open session and discussion