



Contribution ID: 57

Type: **Poster**

High-resolution powder diffractometer SPODI

Friday 6 December 2024 13:45 (3 hours)

SPODI, the Structure Powder Diffractometer at the Heinz Maier-Leibnitz Zentrum in Germany, is a high-resolution neutron powder diffractometer used for the precise determination of crystal and magnetic structures as well as microstructural properties of materials. It features an optimized instrument geometry and advanced detector system, providing high angular resolution and allowing researchers to detect subtle structural features and phase transitions. Equipped with a position-sensitive detector, SPODI enables rapid data collection and studies of materials under varying conditions, such as temperature, electric and magnetic field, applied load etc. It plays a vital role in understanding complex materials like energy materials and magnetic materials, contributing to the development of materials with tailored properties. SPODI also emphasizes user collaboration, offering support for experiment programs and data analysis, which fosters diverse research projects across scientific fields.

Primary author: SENYSHYN, Anatoliy

Co-authors: HOELZEL, Markus; HAUF, Christoph; PFANZELT, Josef; EHRENBERG, Helmut (KIT)

Presenter: SENYSHYN, Anatoliy

Session Classification: Poster Session

Track Classification: Structure Research