Contribution ID : **52** Type : **Oral**

The ODIN Project at the European Spallation Source

Tuesday, 4 September 2018 13:50 (20)

ODIN (Optical and Diffraction Imaging with Neutrons) is a beamline project at the European Spallation Source (ESS). It is a collaboration between the ESS, the Paul Scherrer Institut (PSI) in Switzerland and the Technical University Munich (TUM) in Germany, with TUM as lead institution.
ODIN will provide a multi-purpose imaging capability with spatial resolutions down to the µm range. The pulsed nature of the ESS source - combined with a versatile neutron chopper system - will give access to wavelength-resolved information with variable resolution and bandwidths. Different imaging techniques, from traditional attenuation-based imaging to advanced dark field, polarized neutron or Bragg edge imaging, will be available within the full scope of ODIN with unprecedented efficiency and resolution. A summary of the technical full scope and its science application will be given and the updated conceptual instrument design including its challenges will be presented.

Primary author(s) : LERCHE, Michael (Technische Universität München)

Co-author(s) : Dr MORGANO, Manuel; CALZADA, Elbio (TU Muenchen - FRM II); Dr STROBL, Markus; Dr SCHULZ, Michael (Technische Universität München, Heinz Maier-Leibnitz Zentrum)

Presenter(s) : LERCHE, Michael (Technische Universität München)

Session Classification : Speaker Sessions and Seminars

Track Classification : Instrumentation