10th World Conference on Neutron Radiography

Sunday, 5 October 2014 - Friday, 10 October 2014

Grindelwald, Switzerland

Scientific Programme

This is the 10th World Conference on Neutron Radiology. Neutron radiology is a versatile imaging modality which is complementary to for example X-ray imaging. This conference will cover many topics related to the method.

Beamlines

New installations for neutron imaging will be presented and their layout discussed. It is a unique opportunity to meet the world-wide leading experts in the field und to get their feedback. Synergies and collaborations are intended to be established.

Instrumentation

The instrumentation comprises all hardware aspects necessary for neutron imaging. It includes standard components such as detectors, guides, neutron optics as well as new developments for energy selective imaging, neutron grating interferometry, imaging with polarized neutrons, etc.

Method development

Exploring new features of neutron matter interaction require the development of new methods. This track will focus on the development new methods and experiments using new components of neutron imaging. Examples of methods are energy selective imaging, neutron grating interferometry, polarized neutron imaging.

Data processing

The processing of the imaging data is essential to the success of an imaging experiment. The processing involves different parts like image correction, CT reconstruction, image enhancement, and estimation of physical parameters that describe the sample.

Applications

Neutron imaging allows for a wide range of possible applications in many areas from fundamental research to applied research. This includes purely scientific topics for example from geology, biology, material science, cultural heritage as well as applied research for industrial partners.