

Contribution ID: 32

Type: not specified

Neutron beam focusing in SANS experiments

Thursday 2 March 2023 16:00 (30 minutes)

Since the 1960s, with the advent of the SANS technique, there were also ideas to enhance the resolution at lowest q-values by the application of beam focusing. Alongside with mirror focusing as it found its early adaptation to the KWS-3 beamline in Jülich and later in Garching, there are lenses, magnetic arrays and collimation systems that are more and more applied to complement standard SANS pinhole principles, in order to bridge the regime of measurable momentum transfers towards what is accessible with USANS. These principles are in the meantime referred to as VSANS. Higher brilliance neutron sources of our time are a chance to make VSANS a more common user application to investigate additional information on mesoscopic structures. We look back on developments as well as to the perspectives in the field.

Primary author: Dr CLEMENS, Daniel (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH)

Presenter: Dr CLEMENS, Daniel (Helmholtz-Zentrum Berlin für Materialien und Energie GmbH)