

A new GISANS instrument at the MLZ

Tuesday, 25 June 2019 09:30 (30 minutes)

The new twist in GISANS experiments aims at - for neutrons - relatively fast kinetics and processes in the time domain of 1h and below. Examples range from spray deposition over vapor exposure to tempering processes being all important for industrial applications. The considerably different contrast for neutrons adds valuable complementary information to the much faster GISAXS experiments. Due to the diversity of instruments at the MLZ there are quite a few options for performing GISANS experiments. All of the instruments are optimized for specific purposes and do - in general - perform well within their scope. When aiming at processes and kinetics at surfaces that shall be inspected by GISANS experiments, optimizations of all aforementioned instruments would leave room for faster measurements at the high intensity neutron source FRM-II. A dedicated view on a limited but well tunable Q-range with adaptable resolution for highest intensities would outperform with respect to existing options. A few experimental examples as motivation and technical details for a new instrument are discussed.

Primary author: FRIELINGHAUS, Henrich

Presenter: FRIELINGHAUS, Henrich

Session Classification: Plenary Session 2