## **European Conference on Neutron Scattering 2023**



Contribution ID: 99 Type: Poster

## LoKI & FREIA: The UK in-kind contribution to the first 15 instruments at ESS

Monday 20 March 2023 16:00 (2 hours)

The UK in-kind contribution to the first 15 instruments at ESS includes small-angle neutron scattering and reflectometry instruments.

As one of two SANS beamlines under construction, LoKI has been designed specifically with the needs of the soft matter, materials, and bio-science communities in mind. For example, its high flux and wide simultaneous Q-range will make it ideal for performing spatially-resolved and time-resolved studies. This will be one of the first instruments to be operational at ESS and we will present the current status with the installation which has been making significant progress on site over the last year.

FREIA is a reflectometer with horizontal sample for liquid interfaces and specialising in soft-matter and timeresolved measurements. The novel design uses an elliptical guide to deliver a wide divergence beam onto a fixed sample position. From this beam up to three different collimated beams can be extracted meaning that the incident angle can be quickly changed without moving the sample. This instrument will be one of the latter instruments at ESS, but already most major components have been ordered and some early installations have taken place.

**Authors:** HOUSTON, Judith (European Spallation Source); ARNOLD, Tom; WACKLIN-KNECHT, Hanna (European Spallation Source ESS); LOPEZ, Clara (ESS); ELMER, Jon (STFC); TURNER, David (STFC); HALCROW, William (STFC); NIGHTINGALE, Jim (STFC); JACKSON, Andrew (ESS); LANGRIDGE, Sean (STFC); BURRALL, Hannah (ESS)

Presenter: HOUSTON, Judith (European Spallation Source)

Session Classification: Poster Session MONDAY

Track Classification: Neutron Instrumentation, Optics, Sample Environment, Detectors, and Soft-

ware