

Activities of the Data-Driven Discovery Group on Data Reduction for MLZ Instruments

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Data reduction is a transformation of a dataset collected during a scattering experiment into a dataset in physical units. It requires detailed knowledge of geometry and configuration of the instrument at which the dataset was collected. As a result, data reduction is an essential stage required for linking raw experimental data to a meaningful scientific publication. As such, development of automated and user-friendly data reduction workflows for MLZ instruments is among main foci of the Data-Driven Discovery group. In my talk, I will discuss our recent activities in this context, including: a) development of graphical user interfaces for the DNS and POWTEX instruments, b) integration of the data reduction workflow for SANS-1 into the popular Mantid [1] framework, c) inclusion of multiple scattering into analysis of polarized neutron diffraction data.

[1] O. Arnold, et al., Nucl. Instrum. Methods Phys. Res. A, 764, pp. 156-166 (2014).

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