

Extending the DIALS toolkit

DIALS is a data processing package for single crystal diffraction. It was written initially to serve the needs of large scale X-ray synchrotron and XFEL facilities and developed as an open source, collaborative project to provide maximum benefit to the community. Over the past decade, DIALS has developed into a mature package and provides the backbone for autoprocessing pipelines run at Diamond's MX beamlines and other places. The initial scope, covering analysis from images to integrated intensities, has been extended to include data scaling and multi-crystal analysis. The extensible *toolkit* design of the software has also allowed us to explore new use cases. Some of these will be presented, including plugins for reading new image formats, tools developed to cope with electron diffraction data, and now elements of Laue data processing, both for neutron time-of-flight and X-ray Laue diffraction.

Primary author: WATERMAN, David (UKRI STFC)

Co-author: Dr MCDONAGH, David (UKRI STFC)

Presenter: WATERMAN, David (UKRI STFC)