

Poster Presentation

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DIALS – a toolbox for diffraction data analysis

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DIALS is a collaborative initiative to produce an open source software toolbox encompassing all aspects of diffraction data analysis, with an initial focus on X-ray diffraction data from synchrotrons and free-electron lasers for macromolecular crystallography. DIALS [1] has been developed as a modular plug-in framework that permits flexibility not only in the development of new methods and algorithms but also in the application of these methods to data analysis. DIALS builds on the cctbx [2] in addition to its own dedicated tool-kits. We will present the ideas behind DIALS and give examples of its versatility in permitting the use of several spot-finding and indexing schemes, global refinement and both two and three dimensional integration methods.

[1] D. Waterman, G. Winter, JM Parkhurst, "et al", "The DIALS framework for integration software", *CCP4 Newsletter on Protein Crystallography*, 2013, 49, 16-19., [2] RW Grosse-Kunstleve, NK Sauter, NW Moriarty, "et al", "The Computational Crystallography Toolbox: crystallographic algorithms in a reusable software framework", *J. Appl. Cryst.* 2002, 35, 126-136.



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