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## Synchrotron in situ Experimentation, Big data, and New Tools for Fast Data Processing and Analysis

*Tuesday, 13 September 2022 15:00 (30 minutes)*

Synchrotron *in-situ* or *operando* experiments assume large volumes of experimental information to be collected, visualised, processed and analysed; those volumes increase with advent of new detectors and upgrade of the synchrotron sources. In many cases the data have to be treated during *operando* experiment to tune physical-chemical processes of interest and optimize the information outcome. Fast and efficient algorithms for automated processing and analysis of big scattering data are discussed and illustrated with powder and single crystal diffraction data collected at BM01 station of Swiss-Norwegian Beam Lines at the European Synchrotron Radiation Facility.

**Primary author:** Dr CHERNYSHOV, Dmitry (ESRF Grenoble)

**Presenter:** Dr CHERNYSHOV, Dmitry (ESRF Grenoble)

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