

Neutron Laue diffraction at MLZ

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First neutron Laue experiment was performed in the year 1947 by E. O. Wollan, C. G. Shull and M. C. Marney [1]. You can easily perform it at home every beamtube at MLZ. You just need salt, indium plate and photographic film. Put everything in given order to the beam and wait few second. Process the film and look to the picture. You get information about your crystal quality, orientation, symmetry, crystal structure, magnetic structure, impurities...Or just use new nLaue instrument at SR8b beamport, right after the RESI instrument. The first part of this talk will be devoted to the introduction to Laue technique and its pros and cons. After that I will show you what type of data you can obtain and how to treat it with the open source software Esmeralda [2].

[1] E. O. Wollan, C. G. Shull, and M. C. Marney, Phys. Rev. 73 (1948) 527

[2] <http://lauesuite.com>

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