

Contribution ID: 63 Type: Poster

Relocation of the cold triple axis spectrometer FLEXX to MLZ, Munich: Larmor diffraction and inelastic scattering

Tuesday, 5 December 2023 14:00 (3 hours)

The cold triple-axis spectrometer (TAS) FLEXX at HZB is a well-designed and upgraded instrument [1-4]. There was a strong wish that this excellent instrument should be preserved for the community. One attractive gap in the present instrumentation suite of MLZ, is the Larmor-diffraction technique [5-6] (LD) and, as a natural extension, cold neutron resonant spin echo (NRSE). TAS comes at no extra cost, as it is the main backbone of such an instrument.

The instrument will be placed on a cold neutron guide. Further, new developments are under way to allow for application of magnetic fields at the sample, hitherto not possible [7-9]. This opens up new vistas in the exploration of materials. A last attractive option is the possibility to combine high magnetic fields together with cold TAS.

- [1] M. Skoulatos et al., NIMA 647, 100 (2011).
- [2] M.D. Le et al., Nucl. Instr. Meth. Phys. Res. A 729, 220 (2013).
- [3] F. Groitl et al., Rev. Sci. Instrum. 86 025110 (2015).
- [4] K. Habicht et al., EPJ Web of Conferences 83, 03007 (2015).
- [5] M.T. Rekveldt, Jour. Appl. Phys. 84, 31 (1998).
- [6] M.T. Rekveldt et al., Europhys. Lett. 54, 342 (2001).
- [7] Neutron Spin Echo Proceedings of a Laue-Langevin Institut Workshop, Grenoble, Springer- Verlag, Ed: F. Mezei (1980).
- [8] M.T Rekveldt et al., Jour. Appl. Cryst. 47, 436 (2014).
- [9] K. Habicht, "Neutron-Resonance Spin-Echo Spectroscopy: A High Resolution Look at Dispersive Excitations", Habilitation, University of Potsdam (2016).

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Session Classification: Poster Session

Track Classification: Neutron Methods