

WK.01 : Magnetic structure analysis by neutron diffraction techniques

Organizers: O. Garlea , B. Chakoumakos (ORNL)

Confirmed Lecturers:

- Dr. Juan Rodriguez-Carvajal (Institut Laue-Langevin, Grenoble, France)
- Dr. Andrew Wills (University College London, Department of Chemistry, UK)
- Dr. Eric Ressouche (CEA Grenoble, France)
- Dr. Arsen Gukasov (Laboratoire Léon Brillouin, CEA Saclay, France)

Preliminary Workshop Schedule:

- 8:00 - 8:30 AM: Introduction (**O. Garlea, ORNL**)
- 8:30 - 9:45 AM: Introduction to magnetic diffraction. Application of group theory to magnetic structure determination (**A. S. Wills, UCL**)
- Break
- 10:00 -11:00 AM: Spherical neutron polarimetry in magnetic structure determination (**E. Ressouche, CEA**)
- 11:00 - 12:00 pm: Polarized neutron study of the magnetization density distribution. The flipping ratio method. (**A. Gukasov, LLB**)
- Lunch (Box lunch provided)
- 1:00- 2:30 PM: Recent developments in refinement techniques. Simulated annealing algorithm with FULLPROF (**J. Rodríguez-Carvajal, ILL**)
- Break
- 3:00-18:30 pm: Hand-on session : Exercices. (**O. Garlea, A. Moreira Dos Santos, B. Chakoumakos, ORNL**)