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Update on Polarised Neutron Capabilities at the Australian Centre for Neutron Scattering

Wednesday, 24 November 2021 12:20 (15 minutes)

The Australian Centre for Neutron Scattering offers neutron polarisation capabilities which are compatible with six different neutron scattering instruments, using a combination of polarising supermirrors and ^3He cell spin filters. An overview of these capabilities will be given, followed by a description of some recent experiments which make use of a variety of these capabilities on instruments, including the cold triple-axis spectrometer Sika, and the small-angle neutron scattering instrument Quokka with a recently-commissioned 7 T compensated vertical magnet. Finally, current and future work to expand capabilities will be outlined, such as a new system for polarisation analysis experiments with magnetic fields controlled in 3D for the time-of-flight spectrometer Pelican which will soon be offered to the user community, and a bespoke 0.5 T horizontal magnet system for the thermal triple-axis spectrometer Taipan.

Presenter Gender

Man

Do you wish to take part in the Student Poster Slam

No

Condition of submission

Yes

Students Only - Are you interested in AINSE student funding

No

Level of Expertise

Early Career <5 Years

Pronouns

Which facility did you use for your research

Australian Centre for Neutron Scattering

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