

Magnetism and Magnetic Materials Studied Using the Pelican Time-of-Flight Spectrometer

Monday, 2 December 2019 18:31 (1)

The study of magnetic materials using inelastic neutron scattering (INS) has a long history, dating back to some of the first INS experiments. The Pelican spectrometer is well suited to magnetic studies as the high flux, low background and non-magnetic construction provide ideal conditions for such experiments. Further the instrument is designed for polarisation analysis, a key technique in advanced magnetic characterisation studies. As part of the Pelican user programme, a diverse selection of magnetic properties and materials has been investigated. These include but are not limited to low dimensional quantum magnetism [1], excitations in lanthanoid single molecule magnets [2], frustrated magnetism [3]. In this contribution we will give an overview of some of these successful experiments and showcase future capabilities with the addition of a 7T magnet to the Pelican sample environment suite.

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Speakers Gender

Male

Travel Funding

Level of Expertise

Experienced Researcher

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No

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Session Classification : Welcome Function

Track Classification : Spectroscopy