



Contribution ID: 70

Type: **Poster**

Panda a cold neutron TAS at MLZ

Wednesday, 11 December 2019 15:40 (20 minutes)

Investigations of magnetic excitations focus on new magnetic materials, quantum magnetism, superconductivity, heavy-fermion or low-dimensional systems, frustrated and multiferroic materials. The challenges of high-resolution studies can be answered only by cold neutron (TAS) spectroscopy experiments.

In our days, there is a trend for extreme conditions, searching for exotic spin states. The discovery of these systems is often limited by small sample sizes or weak scattering cross sections, as well as asking for special sample environment such as high magnetic fields and low temperatures. PANDA, being a high-resolution, high-flux cold neutron TAS spectrometer with a remarkably low background, successfully contributes with high-level experiments to a broad variety of scientific topics.

We will report here about the successfully performed and published user experiments on systems mentioned above where PANDA significantly contributed.

Primary authors: Dr RADELYTSKYI, Igor (Jülich Centre for Neutron Science (JCNS) at MLZ, Forschungszentrum Jülich GmbH, Garching, Germany); Dr BERTIN, Alexandre (Institut für Festkörperphysik, TU Dresden, Dresden, Germany); Dr SCHNEIDEWIND, Astrid (Jülich Centre for Neutron Science (JCNS) at MLZ, Forschungszentrum Jülich GmbH, Garching, Germany)

Presenters: Dr RADELYTSKYI, Igor (Jülich Centre for Neutron Science (JCNS) at MLZ, Forschungszentrum Jülich GmbH, Garching, Germany); Dr SCHNEIDEWIND, Astrid (Jülich Centre for Neutron Science (JCNS) at MLZ, Forschungszentrum Jülich GmbH, Garching, Germany)

Session Classification: Poster session

Track Classification: Quantum Phenomena