



TRR 80 Sonderseminar

Am Donnerstag, den 13. Juni um 13:30 Uhr

spricht

Dr. Atsuhiko Miyata

Institute for Solid State Physics, University of Tokyo

über das Thema

***Magneto-optical survey of frustrated magnets
in ultrahigh magnetic fields***

In recent years, frustrated magnets have attracted considerable attention, because frustrated states are very sensitive to any type of perturbations and would exhibit a rich variety of magnetic phases depending on the temperature and the magnetic field. In my talk, I will explain how to generate ultrahigh magnetic fields above 100 T and its application into the magneto-optical measurements of typical 3D frustrated magnets, Cr spinel oxides. In these compounds, a spin-lattice coupling plays a crucial role and induces rich magnetic phases such as a robust 1/2 plateau phase [1, 2]. Magneto-optical measurements under ultrahigh magnetic fields have enabled us to investigate their magnetic phases up to a fully polarized phase. As a result, novel magnetic phase was observed prior to a fully polarized phase [3], which can not be explained by the conventional theory.

[1] H. Ueda et al., Phys. Rev. Lett. 94, 047202 (2005).

[2] K. Penc et al., Phys. Rev. Lett. 93, 197203 (2004).

[3] A. Miyata et al., Phys. Rev. Lett. 107, 207203 (2011).

Gäste sind herzlich willkommen.

Der Vortrag findet im Seminarraum S-403 / Institut für Physik, Universität Augsburg statt.

Gastgeber: Dr. Joachim Deisenhofer
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