



TRR 80 Seminar

Am Dienstag, den 10. Januar um 16:00 Uhr

spricht

Prof. Dr. Manfred Fiebig

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über das Thema

***Unusual Manifestations of Ferroelectric Order in
Multiferroics***

Materials with a coexistence of magnetic and electric order, called multiferroics, are rare because (anti)ferromagnetic and ferroelectric order tend to be mutually exclusive. Magnetic order based on transition-metal exchange interactions requires partially filled 3d orbitals while ferroelectricity of the displacive hybridisation type calls for empty 3d shells. In this sense, any occurrence of magnetoelectric multiferroicity inherently involves unusual realisations of ferroelectric order. In my talk I will highlight various examples for these "exotic ferroelectrics" and how the unconventional origin of the spontaneous polarization leads to manifestations that may be relevant for oxide-electronics devices. The experiments presented here were conducted by optical second harmonic generation and by force-microscopy techniques.

Gäste sind herzlich willkommen.

Der Vortrag findet im Seminarraum S-288/Physik-Süd, Universität Augsburg statt.

Gastgeber: Prof. Dr. Alois Loidl

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