

EINLADUNG

zum Vortrag von

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Magnetoelectric relaxor and temperature-strain phase diagram in KTaO_3 thin films

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Dienstag, 8. Mai 2012, um 17:30 Uhr

Ort: Lise-Meitner-Hörsaal, Fakultät für Physik, Universität Wien,
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Treppenfrierer Zugang: Boltzmannngasse 5, Lift, 1. Stock rechts über den Gang zum Hintereingang des Hörsaals

Abstract:

Solid solution $0.8\text{Pb}(\text{Fe}_{1/2}\text{Nb}_{1/2})\text{O}_3-0.2\text{Pb}(\text{Mg}_{1/2}\text{W}_{1/2})\text{O}_3$ (0.8PFN-0.2PMW) is a magnetoelectric relaxor which shows broad and frequency dependent maxima both in the electric as well as in the magnetic susceptibilities. The Vogel-Fulcher type electric relaxor freeze-out is accompanied by a significant magnetic anomaly demonstrating magnetoelectric coupling and thus magnetoelectric effect. Strain induced ferroelectricity was observed directly at low temperatures in KTaO_3 thin films and the temperature-strain phase diagram was determined.