



# TRR 80 Sonderseminar

Am Donnerstag, den 17. Januar um 14:30 Uhr

spricht

***Prof. Dr. Sándor Bordács***

**BUTE, Budapest**

über das Thema

***Detection of antiferromagnetic domains  
by optical magnetoelectric effect***

One of the main motivations behind the current interest in multiferroics is that they can be building blocks of low-energy consumption nonvolatile memory devices. In this talk, I will demonstrate that simple optical absorption spectroscopy can be used to identify magnetoelectric (ME) antiferromagnetic (AFM) domains of LiCoPO<sub>4</sub>. In case of the THz spin-wave excitations this unusual contrast arising from the optical magnetoelectric effect as confirmed by our microscopic model, which also captures the characteristics of the observed static ME effect. Since these domains and the absorption difference are also present in zero magnetic field it may promote the development of ME memory devices based on AFM insulators.

Gäste sind herzlich willkommen.

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

Gastgeber: Prof. Dr. István Kézsmárki  
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