SFB 608

Einladung zum Sonderkolloquium

Ort: Universität zu Köln
II. Physikalisches Institut, Seminarraum 201

Zeit: 18. Mai 2005, 13 Uhr s.t.
(statt Mitarbeiterseminar II Physik)

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Thema: On multiferroic and other features of gadolinium ferroborate $GdFe_3(BO_3)_4$

The borates with general formula $REM_3(BO_3)_4$, where RE stands for a rare earth or yttrium and M = Al, Ga, Sc, Cr, Fe have recently attracted considerable attention because of their good luminescent and nonlinear optical properties. The crystals of $GdFe_3(BO_3)_4$ possess multiferroic features, which presume the coexistence of elastic, magnetic and ferroelectric order parameters. Most clearly, the coupling of these parameters is observed at low temperatures in the vicinity of a spin-reorientational transition in the Fe subsystem.

Gez. Dr. T. Lorenz