SFB 608

Einladung zum Kolloquium

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

Zeit: 08. June 2005, 13 Uhr s.t.

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Thema: Nano-scale structural complexity in transition metal oxides

In complex transition metal oxides, such as cuprates and manganites, various competing interactions are delicately balanced, resulting in high sensitivity to external stimuli and complex phase diagram. They are also extremely sensitive to disorder, that pins fluctuation and creates phase co-existence often at nano-scale. We discuss some of our recent works on this subject; 1) nickelate $LiNiO_2$ which shows nano-scale domains due to orbital frustration as determined by pulsed neutron pair-density function (PDF) analysis, 2) colossal dielectric permittivity and magnetocapacitance in manganits, and possible local structural fluctuations in the cuprates.

Gez. Prof. D. Khomskii