

# SFB 608

## Einladung zum Kolloquium

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

**Zeit:** Mittwoch, den 26. Mai 2004, 15 Uhr c.t.

**Sprecher:** Prof. T. Hibma  
Groningen University, NL

**Thema:** Spin-dependent transport across anti-phase boundaries in magnetite films.

The magnetism and electronic transport in ultrathin epitaxial magnetite films is very different from the corresponding bulk behaviour. Ultrathin films are no longer ferrimagnetic and have a much higher resistivity, which is strongly dependent on the magnetic field strength. In addition, the Verwey transition is no longer visible. We will relate this anomalous behaviour to the existence of antiferromagnetically coupled anti-phase domains, which occur as natural growth defects in thin films.

Gez. Prof. H.L. Tjeng