

Physikalisches Kolloquium

Ingrid Mertig, Martin-Luther-Universität Halle-Wittenberg
»Magnetism and transport on the sub-nanometer scale«

Einführung: W. Wulfhekel

Spintronics applications are proven to have a huge potential for future sensor and information technologies in which the charge and the spin-degree of freedom of the electrons is exploited. A successful application requires achieving control of the materials and processes involved at the atomic scale. To support the experimental developments, to predict new materials and to optimize the effects under consideration first-principle electronic structure calculations based on density functional theory are the most powerful tool. The method is applied to gain insight into the microscopic origin of magnetic and transport properties of heterostructures as well as molecular contacts.

Freitag, 05.02.2010, 17 Uhr c.t.,

**KIT, Campus Süd,
Otto-Lehmann-Hörsaal, Physik-Flachbau (Geb. 30.22).
Anschließend Nachsitzung im Gastdozentenhaus „Heinrich Hertz“**