

## Institut für Physik

Montanuniversität Leoben

A-8700 LEOBEN, Franz Josef Straße 18, Austria Tel: +43 3842 402-4601, Fax:+43 3842 402-4602 e-mail: physics@unileoben.ac.at





## Di, 20.5.2014, 11:15 Uhr Hörsaal für Physik

## "NANOSTRUCTURES AND THEIR APPLICATION IN PLASMONICS AND SPINTRONICS"

Prof. Dr. Tomáš Šikola

Institute of Physical Engineering Brno University of Technology (BUT), Central European Institute of Technology (CEITEC),

The lecture will deal with the methods of preparation and characterization of nanostructures finding their applications in plasmonics and spintronics. In particular, the structures providing surface plasmon polaritons, loalized surface plasmons and magnetic vortices, and measurement of their functional properties will be addressed. In addition to classical lithographic systems, also special methods based on combination of FIB modification of surfaces and their wet etching, selective growth on substrates pre-patterned by FIB or electron beam, and Ge nanowire growth in SEM for real time monitoring will be discussed.