TECHNISCHE UNIVERSITÄT WIEN
Vienna | Austria

INSTITUT FÜR FESTKÖRPERPHYSIK
Institute of Solid State Physics

Wiedner Hauptstr. 8-10/138, 1040 Wien
www.ifp.tuwien.ac.at

EINLADUNG zum IFP-SEMINAR

An electric-field-induced Mott metal-to-insulator transition in strongly-correlated thin films and superlattices: an inhomogeneous DMFT study

Petar Bakalov

Department of Physics and Astronomy, University of Leuven, Belgium

Host:	Karsten Held, Jan Tomczak
Termin:	Donnerstag, 8 Juni 2017, 15:00 Uhr
Ort:	Institut für Festkörperphysik, TU Wien
	Wiedner Hauptstraße 8-10, 1040 Wien
	Seminarraum DB gelb 07 (gelber Bereich, 7. OG)
Förderer:	FWF I 1395-N26 „GW+DMFT neu“

This talk will offer an overview of inhomogeneous dynamical mean-field theory (IDMFT), a technique for the study of correlated structures with reduced translational symmetry such as thin films and interfaces. An application of the IDMFT to a Hubbard thin film (a stack of coupled two-dimensional Hubbard layers) in the presence of a transverse electric field at zero current will be presented. The case of non-uniform Hubbard interaction U across the film will also be considered.

Reference: Bakalov et al., Phys. Rev. B 93, 165112 (2016)