



# PHYSIKALISCHES KOLLOQUIUM

Mittwoch, 10.10..2012, um 17:15 Uhr

Ort: Reichenhainer Str. 90; Neues Hörsaalgebäude, Raum: 2/N013



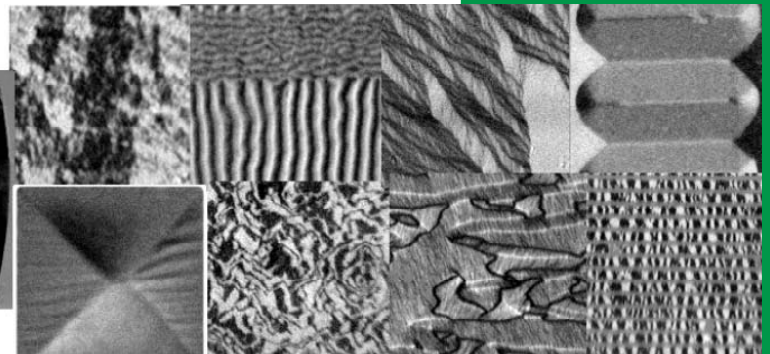
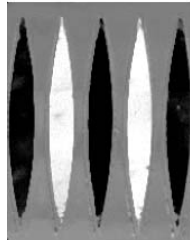
**Prof. Dr. Jeffrey McCord**

CAU Kiel  
Institut für Materialwissenschaft

## ***Applied Magneto-Optics - Magnetic Domains and Magnetization Dynamics***

*For the understanding of the origin and tailoring of effective magnetic properties in magnetic heterostructures it is essential to visualize the magnetic domain distribution in magnetic materials.*

*After an introduction to magneto-optics, the different schemes of magneto-optical microscopy in comparison to other methods for the investigation of magnetic domain formation will be presented. The versatility of magneto-optical microscopy will be illustrated on various examples. These include regular quasi-static imaging, quantitative domain analysis, and layer resolved imaging on extended and patterned magnetic thin films, as well as exchange biased systems. Two examples will be discussed in more detail. First, we give a summary on domain effects due to the patterning of magnetic films in terms of laterally varying magnetic properties by local ion irradiation. In another example, the role of magnetic domain walls in magnetization dynamics will be discussed. An outlook on future trends in magneto-optical microscopy will be provided.*



Alle Zuhörer sind ab 17:00 Uhr zum Kaffee vor dem Hörsaal eingeladen.

Informationen zum Vortrag erteilt Frau Dr. H. Schmidt, Tel.: 0371 531 32481