



EINLADUNG zum IFP-SEMINAR

Topological aspects of switching in magnetic and multiferroic materials

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Host: Andrei Pimenov
Termin: Mittwoch, 26. Juli 2023, 16:00 Uhr
Ort: TU Wien, Freihausgebäude
Wiedner Hauptstraße 8-10, 1040 Wien
Seminarraum DC rot 07 (roter Bereich, 7. OG)

Vor dem Vortrag gibt es ab 15:30 Kaffee und Kekse

Abstract:

Topology has played a prominent role in condensed matter physics in the recent years. In magnetism, topological properties of domain walls and vortices were known for long, and more recently topological magnon band structures and other aspects were discussed. However, switching, the most important process from the viewpoint of applications, has not been investigated in the context of topology. I will discuss magnetoelectric switching in GdMn_2O_5 , the first known topologically protected switching phenomenon, and electric field induced switching in spiral magnets, where topology turns out to play an important role.