



EINLADUNG zum IFP-SEMINAR

- Thema: **Lifshitz phase transitions in the ferromagnetic regime of the Kondo lattice model**
- Vortragender: **Denis Golež**
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- Host: Karsten Held
- Termin: **Dienstag, 14 Januar 2014, 17 Uhr**
- Ort: Institut für Festkörperphysik, TU Wien
Wiedner Hauptstraße 8-10, 1040 Wien
Seminarraum 138C, 9. OG (gelbe Leitfarbe)
- Förderer: ERC-StG-306447 AbinitioDGA

Kondo lattice model represent a paradigmatic model for heavy fermion compounds and in this talk I will represent phase diagrams of the spin-1/2 and spin-1 Kondo lattice models in the regime of ferromagnetic effective exchange interactions. Several distinct ferromagnetic phases are separated by continuous Lifshitz transitions. We find that, quite generically, ferromagnetism and Kondo screening coexist rather than compete both in spin-1/2 and spin-1 models. We establish the hysteretic behavior of the systems in an external magnetic field: spin-flop transitions preempt further Lifshitz transitions at finite magnetic field. At the end I will represent the ferromagnetic version of the Doniach diagram.

