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Einladung zum Seminar

Qimiao Si

Rice University, Houston, USA

" Magnetism and Fermi surface in heavy fermion metals "

Competing ground states and the associated quantum phase transitions occur in a variety of condensed matter systems. One of the basic issues is how to characterize the quantum phases beyond the Landau paradigm of order parameters.

Here we consider this issue in the context of Kondo lattice systems. In the paramagnetic state, the standard description features a large Fermi surface, in the sense that the local moments join the conduction electrons to form the Fermi-surface as a result of Kondo screening.

I will discuss what happens in the antiferromagnetic and ferromagnetic ordered states. I will show the stability of phases with a small Fermi surface, and discuss the implications of the results for a number of heavy fermion materials, including YbRh_2Si_2 , CeRhIn_5 , CeRu_2Ge_2 , and Re-doped URu_2Si_2

Host: S. Bühler-Paschen

Dienstag, 23. Juni 2009, 16:00 Uhr
Seminarraum 138B, 7. OG, Turm C (rot)
Wiedner Hauptstraße 8-10
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