



TRR 80 Sonderseminar

Am Dienstag, den 3. Mai um 16:00 Uhr

spricht

Dr. Maria Daghofer

IFW Dresden

über das Thema

Multi-orbital models for Pnictide Superconductors

Since several bands cross the Fermi surface of iron-based superconductors, an orbital degree of freedom becomes relevant, and orbital effects have been suggested as an explanation of the strongly anisotropic properties of the undoped parent compounds are also proposed as an explanation for 'accidental' nodes. We apply numerical techniques to multi-orbital models in order to investigate magnetic and orbital order in the anisotropic antiferromagnetic phase. While the orbital character of the electrons at the Fermi surface is strongly affected by the magnetic order, the impact of static orbital order turns out to be far weaker. We also discuss nodal and nodeless pairing operators that are compatible with the lattice symmetry and present mechanisms that allow the orbital degree of freedom to create or lift nodes.

Gäste sind herzlich willkommen!

Der Vortrag findet im Seminarraum 288/S, Physik-Gebäude Süd, Universität Augsburg statt.

Gastgeber: Prof. Dr. Arno P. Kampf, Prof. Dr. Thilo Kopp
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