

Sommerfeld Theory Colloquium

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Quantum phase transitions in correlated electron systems

Quantum phase transitions , i.e., phase transitions taking place at zero temperature, have attracted the interest of both theorists and experimentalists in condensed matter physics.

the first part of the talk will describe general aspects of quantum phase transitions, in particular the fascinating interplay of classical and quantum mechanical fluctuations at finite temperatures.

The second part will focus on selected examples of quantum phase transitions, ranging from Mott insulators over heavy fermion metals and high-temperature superconductors to dissipative quantum systems.

Wednesday, 17th May 06, 11.15 h , Room 348 / 349, Theresienstr. 37 / III