



TRR 80 Seminar

Am Dienstag, den 30. Oktober um 16:00 Uhr

spricht

Prof. Dr. Yoshio Kuramoto

Tohoku University, Sendai, Japan

über das Thema

***How to distinguish between itinerant and localized
electrons in solids: Mott vs. Kondo***

In elementary theory of solids, we learn that electrons form energy bands by the periodic potential. Mott argued many years ago that the electron-electron repulsion may break the energy bands, and can localize electrons at each lattice site. The ensuing non-conducting state is now called the Mott insulator. One may ask what happens when the Mott insulator is doped, or when the repulsion becomes weaker. This question seems fundamental to understanding many interesting phenomena in condensed matter, including high-temperature superconductivity and heavy electrons where the Kondo effect plays an essential role. Using highly accurate numerical theory and recent experimental results, we obtain a fresh insight into the duality of electrons, and expect some exotic electronic states.

Gäste sind herzlich willkommen!

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

Gastgeber: Prof. Dr. Dieter Vollhardt

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