



Sonderforschungsbereich 631
Festkörperbasierte Quanteninformationsverarbeitung



Seminar Announcement

Condensed Matter Theory Seminar

Dienstag, 11. Juli 2006

15:00 Uhr

Seminarraum 249, Theresienstr. 37

Prof. Dr. Volker Meden

Universität Göttingen

Correlation effects on electronic transport through quantum dots and wires

We investigate how two-particle interactions affect the electronic transport through several meso- and nanoscopic systems made of two building blocks: quasi one-dimensional quantum wires of interacting electrons and quantum dots with local Coulomb correlations. A recently developed functional renormalization group scheme is used that includes the essential aspects of Tomonaga-Luttinger liquid physics (one-dimensional wires) as well as of the physics of local correlations, with the Kondo effect being an important example. We describe the appearance of a variety of surprising correlation effects.

gezeichnet: Marquardt
