



# TRR 80 Sonderseminar

Am Dienstag, den 14. Juli um 16:00 Uhr

spricht

***Prof. Dr. Mark Jarrell***

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über das Thema

## ***Anderson Localization in Realistic Model Systems***

Anderson localization, a metal-insulator transition brought on by disorder, is notoriously difficult to study. In fact, the numerical effort needed has inhibited the study of realistic model systems with multiple bands and interactions. However, the recently developed Typical Medium Dynamical Cluster Approximation (TMDCA) reduces the numerical cost by many orders of magnitudes enabling the study of the Anderson localization transition in realistic systems. Using the TMDCA, we find that the initial impact of interactions in the Anderson-Hubbard model is to restore the metal-insulator transition in two dimensions and to suppress localization in three dimensions. Results for systems with multiple bands and off-diagonal disorder will also be discussed.

Gäste sind herzlich willkommen.

Der Vortrag findet im Seminarraum S-288 / Institut für Physik, Universität Augsburg statt.

Gastgeber: Jun.-Prof. Dr. Liviu Chioncel  
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