TRR 80 Sonderseminar

Am Dienstag, den 10. Dezember um 16:00 Uhr

spricht

Prof. Dr. Hans Gerd Evertz

TU Graz, Österreich

über das Thema

Fork Tensor Product States - Efficient Five Orbital Real-Time DMFT Solver and Applications

A multi-orbital impurity solver for dynamical mean field theory is presented, which employs a tensor network similar to Matrix Product States and DMRG. The solver works directly on the real-time / real-frequency axis, with an accurate representation of the bath. It yields high spectral resolution at all frequencies
with a computational effort similar to QMC. The efficiency and accuracy of the method will be shown for the three-orbital testbed material SrVO3, where a multiplet structures in the high-energy spectrum is observed, almost impossible to resolve by other methods. For SrMnO3, spectra from a five-orbital models will be shown and compared to experimental results.
The talk will also include a pedagogical introduction into the tensor network techniques employed.

Gäste sind herzlich willkommen.
Der Vortrag findet im Seminarraum S-288, Institut für Physik, Universität Augsburg statt.

Gastgeber: Prof. Dr. Liviu Chioncel
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