

Dual-Fermion approach to Non-equilibrium strongly correlated problems

Monday 4 April 2011 16:30 (2h 30m)

We present a generalization of the recently developed Superperturbation solver for the Anderson impurity model for the non-equilibrium case. We show that the general dual perturbation theory can be formulated on the Keldysh contour. Starting from a reference Hamiltonian system, in which the time-dependent solution is found by exact diagonalization, we make a dual perturbation expansion in order to account for the relaxation effects from the fermionic bath. Simple test results for closed as well as open quantum systems in a fermionic bath are presented.

Author: JUNG, Christoph (Universität Hamburg)

Presenter: JUNG, Christoph (Universität Hamburg)

Session Classification: Poster session