

SFB 608

Einladung zum Kolloquium

Ort: Universität zu Köln
II. Physikalisches Institut, Seminarraum 201

Zeit: Mittwoch, den 25. Juni 2003, 15 Uhr c.t.

Sprecher: Dr. Sebastian Dusuel
Ecole Normale Supérieure Lyon

Thema: Interaction-induced Fermi surface deformations in quasi one-dimensional electronic systems.

The study of the deformations of the Fermi surface, from its free shape to its "dressed" shape, by the interactions, is complicated because of the necessity of using self-consistent methods. I will first show how one can use usual quantum mechanical perturbation theory, and an energy minimisation to compute the shape of the Fermi surface, on a toy model (a ladder of spinless fermions). Then I will explain how one can set up a renormalization group scheme to improve the results.

Gez. Priv. Doz. G. Uhrig