

Seminar on Condensed Matter Theory

Group of Theoretical Physics at the Department of Condensed Matter Physics of Charles University has a pleasure to invite you to attend the seminar

on 12 September 2019 at 15:00

at Faculty of Mathematics and Physics of Charles University, Ke Karlovu 5, 121 16 Praha 2

Seminar room F052



Prof. Eugene Kogan

Department of Physics, Bar-Ilan University, Israel

To Have (Kondo Effect) and Have Not: Renormalization and Scaling

We consider a general model, describing a quantum impurity with degenerate energy levels, interacting with a gas of itinerant electrons, derive general scaling equation for the model, and analyse the connection between its particular forms and the symmetry of interaction.

The approach is applied to the spin-anisotropic Kondo model generalized for the case of the power law DOS for itinerant electrons. The scaling equation is specified and solved analytically in terms of elliptic functions.

We also introduce spin-anisotropic Coqblin-Schrieffer model, apply the general method to derive scaling equation for that model and integrate the derived equation analytically.

