

Third Reimensburg Meeting of FOR 723 December 7 and 8, 2011

Wednesday, December 7

9:00-9:05

Introduction

9:05-9:40

Wave packet analysis of renormalization group flows for interacting fermions

MATTHIAS OSSADNIK (ossadnik@itp.phys.ethz.ch)

9:40-10:15

Effective interactions in multi-band systems from constrained summations

CARSTEN HONERKAMP (honerkamp@physik.rwth-aachen.de)

10:45-11:10

Frequency Dependent Vertex Functions of the 2D Hubbard Model at Weak Coupling

CHRISTOPH HUSEMANN

(c.husemann@fkf.mpg.de)

11:10-11:30

Suppression of the Hubbard vertex from the quasiparticle weight

KAY-UWE GIERING (giering@thphys.uni-heidelberg.de)

11:30-12:00

The polaron to molecule transition: functional RG with full feedback

TILMAN ENSS (tilman.enss@ph.tum.de)

12:00-12:30

Fermionic RG study of superconductivity in the attractive Hubbard model

ANDREAS EBERLEIN (a.eberlein@fkf.mpg.de)

14:00-14:30

Ferromagnetic instability and self-energy effects in 2D electronic systems

A. KATANIN (katanin@mail.ru)

14:30-15:00

A renormalization group approach to time dependent transport through correlated quantum dots

DANTE MARVIN KENNES (Dante.Kennes@rwth-aachen.de)

15:00-15:30

Non-equilibrium time-evolution of bosons from the functional renormalization group

PETER KOPIETZ (pk@itp.uni-frankfurt.de)

15:30-16:00

Nonequilibrium Kondo model: the RG flow from weak to strong coupling

MIKHAIL PLETYUKHOV (pletmikh@physik.rwth-aachen.de)

17:30-17:50

Interplay of Coulomb interaction and spin-orbit effects in multi-level quantum dots

STEPHAN GRAP (stephan.grap@rwth-aachen.de)

17:50-18:10

Adiabatic response in the interacting resonant level model

OLEKSIY KASHUBA (kashuba@physik.rwth-aachen.de)

18:10-18:30

Renormalization-group analysis of a spin-1 Kondo dot: Non-equilibrium transport and relaxation dynamics

CHRISTOPH B. M. HÖRIG (hoerig@physik.rwth-aachen.de)

Thursday, December 8

9:30-9:50

An FRG approach to the Heisenberg-Kitaev model

JOHANNES REUTHER (reuther@kit.edu)

9:50-10:10

Benchmarking the functional renormalization group for spin systems

STEFAN GÖTTEL (goettel@physik.rwth-aachen.de)

10:10-10:30

Quantum criticality of dipolar spin chains

ALDO ISIDORI (isidori@itp.uni-frankfurt.de)

11:00-11:20

Low-Dimensional Chiral Physics: Magnetic Catalysis

DANIEL D. SCHERER (daniel.scherer@uni-jena.de)

11:20-11:40

Anomalous criticality near semimetal-to-superfluid quantum phase transition in a two-dimensional Dirac Cone model

BENJAMIN OBERT (b.obert@fkf.mpg.de)

11:40-12:00

Nonlocal effective average action approach to crystalline phantom membranes

NILS HASSELMANN (n.hasselmann@fkf.mpg.de)

13:30-13:50

The zero-dimensional $O(N)$ vector model as a benchmark for perturbation theory, the large- N expansion and the functional renormalization group

LORENZ BARTOSCH (lb@itp.uni-frankfurt.de)

13:50-14:10

Groundstate(s) of Bilayer Graphene

MICHAEL M. SCHERER (scherer@physik.rwth-aachen.de)

14:10-14:30

Ultracold Atoms in a Box

JENS BRAUN (j.braun@uni-jena.de)

14:30-15:05

Functional renormalization for spontaneous symmetry breaking in the Hubbard model

C. WETTERICH (c.wetterich@thphys.uni-heidelberg.de)