Spectral Theory and Dynamics of Quantum Systems

GRADUIERTENKOLLEG 1838

Stuttgart-Tübinger Doktorandenseminar

11. Mai 2015

Universität Stuttgart

Pfaffenwaldring 57, 70569 Stuttgart

Raum 8.122

Programm	
14.30 – 14.55	**Bernd Brumm:** A matrix-free Legendre spectral method for initial-boundary value problems
15.00 – 15.25	**Johannes von Keler:** Mean Field Limits in Waveguides
15.30 – 16.00	**Ulrich Linden:** Das Fermi-Polaron
Kaffeepause	
16.30	**Mathematisches Kolloquium**
ab 17.30	**Nachsitzung**

Mathematisches Kolloquium:

Multiscale Methods in Many-Body Theory

Prof. Manfred Salmhofer (Universität Heidelberg)

ABSTRACT: Understanding the behaviour of many-body systems remains a major challenge for mathematics and physics. I will describe the approach to quantum many-body systems via functional integrals and discuss some cases in which it has been made mathematically rigorous using multiscale constructions. Specifically, I will discuss fermions systems at low density and constructions that preserve analyticity properties of correlation functions.

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