



Spectral Theory and Dynamics of Quantum Systems

GRADUIERTENKOLLEG 1838

Stuttgart-Tübinger Doktorandenseminar

10. Juli 2017

Universität Stuttgart

Raum: 8.122, Pfaffenwaldring 57, Campus Vaihingen

Programm		
14.00 – 14.25	Mario Laux	Effektive Elektron-Elektron-Wechselwirkung in Kupferoxid-Schichten
14.30 – 14.55	Hanna Walach	Time integration of Tucker Tensors
Pause		
15.15 – 15.40	Lenon Minorics	Spectral Asymptotics for Krein-Feller-Operators w.r.t. Random Recursive Cantor Measures
15.45 – 16.10	Dr. Jochen Schmid	Approximate dynamics of the mean-field polaron in the high-frequency limit
Kaffeepause		
16:45	Mathematisches Kolloquium	
ab 18:15	Nachsitzung	

Mathematisches Kolloquium:

Vector analysis and non-linear PDE on fractals

Dr. Michael Hinz (Universität Bielefeld)

ABSTRACT: In the first part of the talk we review some basic concepts of the analysis on fractals, for instance the definitions of energy forms and Laplacians. In the second part we will then discuss how to formulate and study equations that involve vector quantities such as Burgers equation, Navier-Stokes equations or evolution equations with magnetic potentials. We will sketch some results and explain the difficulties involved. Most parts of the presentation will not need any prior knowledge.