



Spectral Theory and Dynamics of Quantum Systems

GRADUIERTENKOLLEG 1838

Stuttgart-Tübinger Doktorandenseminar

23. Januar 2015

Universität Stuttgart

Pfaffenwaldring 57, 70569 Stuttgart

Raum 8.122

Programm

14.30 – 14.55

Andreas Deuchert: Some Remarks on a Family of Monotone Quantum Relative Entropies defined by Mathieu Lewin and Julien Sabin

15.00 – 15.25

Hanna Walach: Dynamische Niedrigrangapproximation

15.30 – 16.00

Nicolai Lang: Majorana Modes in an interacting & number-conserving Theory

Kaffeepause

16.30

Mathematisches Kolloquium

ab 17.30

Nachsitzung

Mathematisches Kolloquium:

Pointwise estimates on derivatives of Coulombic wavefunctions

Prof. Thomas Østergaard Sørensen (LMU)

ABSTRACT: In this talk we prove (optimal) a priori pointwise bounds for all derivatives of non-relativistic Coulombic eigenfunctions, involving negative powers of the distance to the singularities of the many-body potential. If time permits, we discuss consequences for the corresponding electron density.

This is joint work with S. Fournais (Aarhus) and T. Hoffmann-Ostenhof (Vienna).
