

RIMS Workshop

Spectral and Scattering Theory and Related Topics

Room 420, Research Institute of Mathematical Sciences, Kyoto University

February 16–18, 2011

Organizer – KAZUSHI YOSHITOMI (Tokyo Metropolitan University)

Program

16 Wednesday

10:00–10:50 YAROSLAV V. KURYLEV (University College of London)

Inverse Scattering Problem for Hyperbolic Manifolds with Conical Singularities

11:00–11:50 MATTI LASSAS (University of Helsinki)

On the uniqueness and stability for the inverse problems for heat and wave equations

13:00–13:50 GUNTHER UHLMANN (University of Washington and University of California, Irvine)

Travel time tomography, boundary rigidity and the scattering relation

14:00–14:50 ADRIAN NACHMAN (University of Toronto)

Reconstruction in the Calderón problem with partial data

15:10–16:00 SAMULI SILTANEN (University of Helsinki)

Electrical impedance tomography

16:10–17:00 GEN NAKAMURA (Hokkaido University)

Inverse boundary value problem for anisotropic heat operators

17 Thursday

10:00–10:50 EVGENY KOROTYAEV (Leningrad State University)

Inverse problems, trace formulas and resonances for multidimensional Schrödinger operators on the lattice

11:00–11:50 PAVEL EXNER (Nuclear Physics Institute, ASCR)

Periodic quantum graphs and their local perturbations

13:00–13:50 JOHANNES SJÖSTRAND (Universite de Bourgogne (Dijon))

Semi-classical analysis and tunneling for the Kramers-Fokker-Planck operator

14:00–14:50 CHRISTIAN GÉRARD (Universite de Paris XI (Paris-Sud))

Scattering theory for the Klein-Gordon equation with non-positive energy

15:10–16:00 DAVID DAMANIK (Rice University)

Spectral properties of the Fibonacci Hamiltonian

16:10–17:00 TAKUYA MINE (Kyoto Institute of Technology)

The spectrum of the Aharonov-Bohm Hamiltonian on the hyperbolic plane

18 Friday

10:00–10:50 STEPHANE NONNENMACHER (Commissariat a l'Energie Atomique (Saclay) – CENS)

Semiclassical scattering with chaotic trapping

11:00–11:50 SERGE RICHARD (Universite de Lyon and Tsukuba University)

Time delay is a common feature of quantum scattering theory

13:20–14:10 ERIK SKIBSTED (Aarhus University)

Spectral and scattering theory at thresholds

14:20–15:10 ANDRÁS VASY (Stanford University)

Wave propagation on asymptotically De Sitter and Anti-de Sitter spaces

15:40–16:30 KEN-ICHI ITO (Tsukuba University)

Scattering theory from a geometric view point