

# Spectral and Scattering Theory and Related Topics

Date: December 2nd (Mon.) – 4th (Wed.) 2019.

Place: Research Institute for Mathematical Sciences (RIMS), Room 111.

# Program

## December 2nd (Monday)

13:30 – 14:30 ISOZAKI, Hiroshi

Continuum limit for lattice Hamiltonians

14:45 – 15:45 RICHARD, Serge (Nagoya university)

Discrete Laplacian in a half-space with a periodic surface potential:

- Resolvent expansions, scattering matrix, and wave operators -

16:00 – 17:00 ASSAL, Marouane (Pontificia Universidad Católica de Chile)

Eigenvalue splitting for a system of Schrödinger operators with an energy-level crossing

#### December 3rd (Tuesday)

9:45 – 10:45 KAWASHITA, Mishio (Hiroshima university)

Asymptotics of some function corresponding to refraction phenomena arising in inverse problems for wave equations in flat two-layered medium

11:00 – 12:00 MORIOKA, Hisashi (Ehime university)

Non-scattering energies for acoustic-type equations on manifolds with a single flat end

## (Lunch)

13:30 - 14:30 KAWAMOTO, Masaki (Ehime university)

Mourre theory for time-periodic magnetic fields

14:45 - 15:45 KIYOSE, Amane (Kobe university)

On the Mourre estimates for Floquet Hamiltonians

**16:00** – **17:00** TAIRA, Koichi (Tokyo university)

Scattering theory for repulsive Schrödinger operators and applications to limit circle problem

# December 4th (Wed)

9:45 – 10:45 DIMASSI, Mouez (Université de Bordeaux)

On the Schrödinger operator with a confined magnetic field and a slowly varying potential

11:00 – 12:00 HIGUCHI, Kenta (Ritsumeikan university)

Resonance free domain for a system of Schrödinger operators with an energy-level crossing

Organizer: WATANABE, Takuya (Ritsumeikan university)

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