International Workshop
Spectral Methods in Partial Differential Equations
– Program –

Day 1: October 31 (Saturday)

8:45–9:00 Opening Speech

9:00–9:45 Hiroshi ISOZAKI (University of Tsukuba, Japan)
Spectral properties of higher-dimensional quantum walks

9:45–10:30 Vincent BRUNEAU (Université de Bordeaux, France)
A Poincaré-Steklov map for Dirac operators

Tea Break

10:45–11:30 Wei-Xi LI (Wuhan University, China)
Local well-posedness for the Boltzmann equation with hard potentials

11:30–12:15 Junyong ZHANG (Beijing Institute of Technology, Beijing)
Pointwise dispersive estimates for Schrödinger equation on manifolds with conical singularities

Lunch

14:00–14:45 Francis NIER (Université Sorbonne Paris Nord, France)
Multiscale analysis for twisted bilayer graphene

14:45–15:30 Kenta HIGUCHI (Gifu University, Japan)
Propagation of wave packets through a degenerate crossing in a model system

Tea Break

15:45–16:30 Ping ZHANG (Chinese Academy of Sciences, China)
TBA

16:30–17:15 Vesselin PETKOV (Université de Bordeaux, France, online lecture)
Multiple reflecting rays and inverse scattering problems for obstacles

Day 2: November 1st (Sunday)

9:00–9:45 Zhifei ZHANG (Peking University, China)
Linear inviscid damping and enhanced dissipation for shear flows

9:45–10:30 Ning JIANG (Wuhan University, China)
TBA

Tea Break

10:45–11:30 François NICOLEAU (Nantes Université, France)
On Uniqueness of Radial Potentials for Given Dirichlet Spectra with Distinct Angular Momenta

11:30–12:15 Hiroyuki CHIHARA (University of the Ryukyus, Japan)
Normal operators of double fibration transforms

Lunch

14:00–14:45 Frédéric HERAU (Nantes Université, France)
Hypocoercivity in cascade for linearized Boltzmann type equations with external potentials

14:45–15:30 Zhiwu LIN (Fudan University, China)
Dissipation-induced instability and turning points in rotating stars

Tea Break

15:45–16:30 Daniel HAN-KWAN (Nantes Université, France)
Semiclassical limit of the cubic nonlinear Schrödinger equation for mixed states

16:30–17:15 Kai YANG (Southeast University, China)
Dynamics of nonlinear Schrödinger equation

Day 3: November 2nd (Monday)

9:00–9:45 Jiangong YOU (Nankai University, China)
Admissible Fourier Lengths, KAM Reducibility, and Spectral Application

9:45–10:30 Kouichi TAIRA (The University of Tokyo, Japan)
Large eigenvalues and logarithmic Weyl law of the Connes-Moscovici operator

Tea Break

10:45–11:30 Zhongwei SHEN (Westlake University, China)
The magnetic Laplacian in a bounded domain