

Tokyo-Berkeley Mathematics Workshop
Partial Differential Equations and Mathematical Physics

January 9–13, 2017

Room 123, Graduate School of Mathematical Sciences

University of Tokyo

January 9 (Mon):

9:30–10:30: S. Dyatlov (MIT), M. Zworski (Berkeley)
Microlocal methods in chaotic dynamics (I)

10:50–11:50: M. Tsujii (Kyushu)
The spectrum of semi-classical transfer operator for expanding-semi flows

12:00–13:00: P. Hintz (Berkeley)
Non-linear stability of Kerr-de Sitter black holes (I)

14:30–15:30: K. Ito (Kobe)
Stationary scattering theory on manifolds with ends (I)

15:40–16:40: H. Mizutani (Osaka)
Global-in-time Strichartz estimates for Schrödinger equations on long-range asymptotically conic manifolds

January 10 (Tue):

9:30–10:30: P. Hintz (Berkeley)
Non-linear stability of Kerr-de Sitter black holes (II)

10:50–11:50: F. Macia (Madrid & Tokyo)
Concentration, non-concentration and controllability of Schrödinger flows

12:00–13:00: S. Dyatlov (MIT), M. Zworski (Berkeley)
Microlocal methods in chaotic dynamics (II)

14:30–15:30: K. Ito (Kobe)
Stationary scattering theory on manifolds with ends (II)

15:40–16:40: A. Drouot (Berkeley)
Pollicott–Ruelle resonances via kinetic Brownian motion

January 11 (Wed):

9:30–10:30: P. Hintz (Berkeley)
Non-linear stability of Kerr-de Sitter black holes (III)

10:50–11:50: K. Ito (Kobe)
Stationary scattering theory on manifolds with ends (III)

12:00–13:00: T. Yoneda (Tokyo)
Mathematical considerations of laminar-turbulent transition and vortex thinning in 2D turbulence (I)

(Free Afternoon)

January 12 (Thu):

9:30–10:30: K. Ito (Kobe)

Stationary scattering theory on manifolds with ends (IV)

10:50–11:50: S. Yamada (Gakushuin)

Construction of stationary solutions to the 4+1 Einstein equation with non-spherical blackholes

12:00–13:00: S. Dyatlov (MIT), M. Zworski (Berkeley)

Microlocal methods in chaotic dynamics (III)

14:30–15:30: P. Hintz (Berkeley)

Non-linear stability of Kerr-de Sitter black holes (IV)

15:40–16:40: T. Yoneda (Tokyo)

Mathematical considerations of laminar-turbulent transition and vortex thinning in 2D turbulence (II)

January 13 (Fri):

9:30–10:30: S. Dyatlov (MIT), M. Zworski (Berkeley)

Microlocal methods in chaotic dynamics (IV)

10:50–11:50: K. Abe (Kyoto)

Global well-posedness of the two-dimensional exterior Navier-Stokes equations for non-decaying data

12:00–13:00: T. Yoneda (Tokyo)

Mathematical considerations of laminar-turbulent transition and vortex thinning in 2D turbulence (III)

14:30–15:30: T. Yoneda (Tokyo)

Mathematical considerations of laminar-turbulent transition and vortex thinning in 2D turbulence (IV)

15:40–16:40: Y. Miyamoto (Tokyo)

Intersection number and applications for semilinear elliptic equations with general supercritical growth

Organizers:

M. Zworski (University of California, Berkeley, zworski@math.berkeley.edu)

S. Nakamura (University of Tokyo, shu@ms.u-tokyo.ac.jp)

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