

RIMS Workshop on
Mathematical Analysis of Viscous Incompressible Fluid

Organizers Toshiaki Hishida (Nagoya University)
 Yoshihiro Shibata (Waseda University)

November 25–27, 2019

Venue: RIMS, Kyoto University, Room No. 111

Program

Monday, November 25

- 13:30–14:20 Yoshihiro Shibata (Waseda University)
 \mathcal{R} -solver and periodic solutions of the Navier-Stokes equations
- 14:30–15:20 Giovanni P. Galdi (University of Pittsburgh)
 Viscous flow past a body translating by time-periodic motion with zero average
- 15:40–16:30 Xin Zhang (Waseda University)
 The \mathcal{R} -bounded operator families arising from the study of the barotropic compressible flows with free surface

Tuesday, November 26

- 10:00–10:50 Gregory Seregin (University of Oxford)
 Solutions to Navier-Stokes equations that are bounded in Lorentz space $L^{3,\infty}$
- 11:00–11:50 Hiroshi Suito (Tohoku University)
 Modeling and simulation for blood flows in human aorta
- 13:30–14:00 Keiichi Watanabe (Waseda University)
 The Stokes operator in exterior Lipschitz domains
- 14:10–14:40 Kenta Oishi (Nagoya University)
 On the \mathcal{R} -boundedness for the generalized Stokes resolvent problem in an infinite layer with Neumann boundary condition
- 15:00–15:50 Julien Guillod (Sorbonne University)
 Loss of uniqueness through self-similar singularities
- 16:00–16:50 Yuzuru Inahama (Kyushu University)
 Paracontrolled quasi-geostrophic equation with space-time white noise
- 17:30–19:30 Banquet

Wednesday, November 27

10:00–10:50 Mikhail V. Korobkov (Fudan University)

On boundary value problem for steady Navier–Stokes system in 2D exterior domains

11:00–11:50 Mitsuo Higaki (Kobe University)

Regularity over a highly oscillating Lipschitz boundary

This workshop is held by RIMS in cooperation with:
Mathematics and Physics Unit “Multiscale Analysis, Modeling and Simulation”, Top
Global University Project, Waseda University.