RIMS Workshop on

Mathematical Analysis of Viscous Incompressible Fluid

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

November 16–18, 2015

Venue: RIMS, Kyoto University, Room No. 111

Program

Monday, November 16

13:30–14:30 Maria E. Schonbek (University of California Santa Cruz)
On asymptotic isotropy for a hydrodynamic model of liquid crystals

14:40–15:40 Dieter Bothe (Technical University of Darmstadt)
Modeling and simulation of mass-transfer across contaminated fluid interfaces

16:00–16:30 Pen-Yuan Hsu (University of Tokyo)
Initial value conditions for the Navier-Stokes equations in the weighted Serrin class

Tuesday, November 17

10:00–11:00 Roland Glowinski (University of Houston)
Symmetry breaking and Hopf bifurcation phenomena for incompressible viscous flow in an expansion channel

11:10–12:10 Yasushi Taniuchi (Shinshu University)
Brezis-Gallouet-Wainger type inequalities and blow-up criteria for Navier-Stokes equations in bounded domains

13:30–14:00 Rhodri Nelson (Kyoto University)
Linear feedback stabilization of point vortex equilibria near a Kasper Wing

14:10–14:40 Yuko Enomoto (Shibaura Institute of Technology)
Some global well-posedness results for the compressible barotropic viscous fluid flow

15:00–15:30 Joanna Renclawowicz (Polish Academy of Sciences)
Inflow-outflow nonstationary Navier-Stokes motion with large data

15:40–16:40 Wojciech Zajaczkowski (Polish Academy of Sciences)
Stability problems to the Navier-Stokes and magnetohydrodynamics equations

17:30–19:30 Banquet

Wednesday, November 18

10:00–11:00 Marta Sanz-Solé (University of Barcelona)
Probability densities under mild regularity conditions

11:10–12:10 Marius Tucsnak (University of Bordeaux)
Free and controlled particles in a viscous incompressible flow

13:30–14:00 Masato Hoshino (University of Tokyo)
KPZ equation with fractional derivatives of white noise

14:10–14:40 Go Takahashi (Waseda University)
Partial regularity and extension of solutions to the Navier-Stokes equations

14:50–15:20 Sri Maryani (Waseda University)
Global well-posedness for free boundary problem of the Oldroyd-B model fluid flow

15:40–16:10 Kohei Soga (Keio University)
Local well-posedness and global well-posedness of two-phase flows: compressible-compressible case

16:20–16:50 Yohei Tsutsui (Shinshu University)
Div-curl estimates with critical power weights

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