### **RIMS Workshop on**

# Mathematical Analysis of Viscous Incompressible Fluid

Organizers: Yasunori Maekawa (Kyoto University) Yoshihiro Shibata (Waseda University)

Date: December 4 – 6, 2017

Venue: Room 111, Research Institute for Mathematical Sciences, Kyoto University

## Program

#### Monday, December 4

13:30 - 14:20 Walter Craig (MacMaster University) On the size of the Navier - Stokes singular set

14:30 - 15:20 Jan Brezina (Tokyo Institute of Technology) Good concept of a solution to complete Euler system

15:40 - 16:10 Tatsu-Hiko Miura (The University of Tokyo) On the Navier-Stokes equations in a curved thin domain

16:20 - 16:50 Ken Furukawa (The University of Tokyo) Asymptotic stability of Oseen type Navier-Stokes flow under large perturbation

### Tuesday, December 5

10:00 - 10:50 Anna Mazzucato (Penn State University) The vanishing viscosity limit in porous media

11:00 - 11:50 Takeshi Matsumoto (Kyoto University) Do dissipative weak Euler solutions dream of turbulence? 13:30 - 14:20 Mads Kyed (TU Darmstadt) Occurrence of resonance in a thin elastic structure interacting with a viscous fluid

14:30 - 15:20 Matthias Hieber (TU Darmstadt) On the primitive equations with rough data

15:40 - 16:30 Toshiaki Hishida (Nagoya University) Asymptotic structure of steady flow around a two-dimensional rotating body

Around 17:45  $\sim$  Banquet

### Wednesday, December 6

10:00 - 10:50 Alex Mahalov (Arizona State University) Stochastic three-dimensional Navier-Stokes equations + waves: averaging, convergence, regularity and nonlinear dynamics

11:00 - 11:50 Takahiro Okabe (Hirosaki University) Remark on the strong solvability of the Naiver-Stokes equations in the weak L^n space

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