RIMS Workshop

on

Mathematical Analysis of Viscous Incompressible Fluid

Organizers
Toshiaki Hishida (Nagoya University)
Yoshihiro Shibata (Waseda University)
Senjo Shimizu (Shizuoka University)

Date: November 25 - 27, 2013
Venue: RIMS, Kyoto University, Room No. 111

Program

Monday, November 25

13:30–14:30  Tadahisa Funaki (University of Tokyo)
Kardar-Parisi-Zhang equation and its approximation

14:40–15:40  Marco Romito (University of Pisa)
Densities for the Navier-Stokes equations with noise

16:00–16:30  Bin Xie (Shinshu University)
SPDEs deduced from evolitional models of two-dimensional Young diagrams

Tuesday, November 26

10:00–11:00  Maria E. Schonbek (University of California Santa Cruz)
$L^2$-asymptotic stability of mild solutions to Navier-Stokes system in $\mathbb{R}^3$

11:10–12:10  Taku Yanagisawa (Nara Women University)
Boundary value problems for stationary MHD equations

13:30–14:00  Masashi Aiki (Keio University)
Motion of a Vortex Filament in an External Flow

14:10–14:40  Takayuki Kubo (University of Tsukuba)
On two phase problem: compressible - compressible model problem
15:00–15:30  Okihiro Sawada (Gifu University)  
Mathematical analysis of spin-coat model: maximal regularity theory and method of Newton polygon

15:40–16:40  Masao Yamazaki (Waseda University)  
Stability of stationary solutions to the two-dimensional Navier-Stokes exterior problem

Wednesday, November 27

10:00–11:00  Mitsuhiro T. Nakao (Sasebo National College of Technology)  
Numerical verification method of solutions for nonlinear elliptic and parabolic problems

11:10–12:10  Yoshitaka Watanabe (Kyushu University)  
A computer-assisted proof of the Kolmogorov problem of incompressible viscous fluid

13:30–14:00  Tomoyuki Miyaji (Kyoto University)  
Craik’s 3D dynamical system arising in fluid mechanics

14:10–14:40  Miho Murata (Waseda University)  
$L_p$-$L_q$ maximal regularity and its application

15:00–15:30  Ryo Takada (Tohoku University)  
Long time existence for the 3D incompressible Euler equations with high-speed rotation

15:40–16:10  Masahiro Suzuki (Tokyo Institute of Technology)  
Asymptotic stability of stationary solutions to the Euler-Poisson equations for a multicomponent plasma

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