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 evolutional 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) $L_p-L_q \text{ maximal regularity and its application}$

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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