

RIMS Workshop
on
Mathematical Analysis in Fluid and Gas Dynamics

Organizers Takayuki Kobayashi
(Saga University)
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Date : from July 6 to 8, 2011

Venue : RIMS, Kyoto University, Room No. 420

Program

Wednesday, July 6

- 14 : 00~14 : 50 Toshiaki Hishida (Nagoya University)
Resolution of the Stokes paradox by the rotation of bodies in the plane
- 15 : 00~15 : 50 Takahiro Okabe (Tohoku University)
Lower bound of L^2 decay of the Navier-Stokes flow in the half space R_+^n
- 16 : 10~17 : 00 Okihiro Sawada (Gifu University)
Mild solutions to the Navier-Stokes equations in unbounded domains with unbounded boundary

Thursday, July 7

- 10 : 00~10 : 50 Hideyuki Miura (Osaka University)
Fundamental solutions of diffusion equations related to certain Dirichlet forms and the quasi-geostrophic equation
- 11 : 00~11 : 50 Hirofumi Notsu (Waseda University)
Numerical schemes for flow problems based on the method of characteristics

- 12 : 00~12 : 30 Hitoshi Funagane (Kyoto University)
Poiseuille and thermal transpiration flows of a highly rarefied gas
- 14 : 00~14 : 50 Yongqian Zhang (Fudan University)
On the steady supersonic flow past a curved cone
- 15 : 00~15 : 50 Yoshihiro Ueda (Kobe University)
Decay structure of regularity-loss type for symmetric hyperbolic systems with relaxation
- 16 : 10~17 : 00 Kenji Nishihara (Waseda University)
Critical exponent for semilinear wave equation with time-dependent damping

Friday, July 8

- 10 : 00~10 : 50 Tatsuo Iguchi (Keio University)
Shallow water approximations for water waves over a moving bottom
- 11 : 00~11 : 50 Kohei Soga (Waseda University)
Continuous limit of random walks and its application to approximation of nonlinear PDEs
- 12 : 00~12 : 30 Mamoru Okamoto (Kyoto University)
Well-posedness of the Maxwell-Dirac system in $1 + 1$ space time dimensions
- 14 : 00~14 : 50 Tohru Nakamura (Kyushu University)
Asymptotic stability of stationary waves for symmetric hyperbolic-parabolic system in half space
- 15 : 00~15 : 50 Toshitaka Nagai (Hiroshima University)
A parabolic-elliptic system of drift-diffusion type in R^2 for the subcritical case