RIMS Workshop

on

Mathematical Analysis in Fluid and Gas Dynamics

Organizers   Yoshiyuki Kagei
(Kyushu University)
Shinya Nishibata
(Tokyo Institute of Technology)

Date   from July 5 to 7, 2006
Venue   RIMS, Kyoto University, Room No. 420

Program

Wednesday, July 5

13 30 14 20   Yoshihiro Shibata (Waseda University)
L_p-L_q decay estimate of Stokes semigroup in an exterior domain

14 30 15 20   Makoto Tsubota (Osaka City University)
Numerical analysis of quantum turbulence

15 40 16 10   Masahiro Suzuki (Tokyo Institute of Technology)
Asymptotic behavior and classical limit of solutions to quantum
hydrodynamic model for semiconductors

16 20 17 10   Jiri Neustpa (Czech Academy of Science)
Navier-Stokes equations with the generalized impermeability bound-
ary conditions

Thursday , July 6

9   45   10   35   Senjo Shimizu (Shizuoka University)
L_p-L_q maximal regularity of the interface problem for the Stokes
equations in a bounded domain

10	45	11	35	Taku Yanagisawa (Nara Women's University)

10 45 11 35   Taku Yanagisawa (Nara Women's University)
Hodge decomposition of L^r vector fields on a bounded domain and its applications to the Navier-Stokes equations

11 45 12 35   Yoshitaka Watanabe (Kyushu University)
Some computer assisted proofs on the bifurcation structure of solutions for the Rayleigh-Benard problem

14 00 14 50   Shigeru Takata(Kyoto University)
Half-space problem of the nonlinear Boltzmann equation for weak evaporation and condensation of a binary mixture of vapors

15 00 15 50   Takashi Sakajo (Hokkaido University)
Structure of invariant dynamical systems embedded in the N-vortex motion on sphere with pole vortices

16 10 17 00   Hisashi Okamoto (Kyoto Univeristy)
Well-posedness of the generalized Proudman-Johnson equation without viscosity

Friday , July 7

10 00 10 50   Tohru Nakamura (Kyushu University)
Large-time behavior of solutions for the compressible viscous fluid in a half space

11 00 11 50   Harumi Hattori (West Virginia University)
One-dimensional viscous conservation laws with discontinuous initial data

13 30 14 20   Wen-An Yong (Tsinghua University, Tokyo Institute of Technology)
Existence of traveling wave solutions for hyperbolic systems of balance laws

14 30 15 00   Yoshihiro Ueda (Kyushu University)
Large time behavior of solutions to a semilinear hyperbolic system with relaxation

15 10 16 00   Nakao Hayashi (Osaka University)
Modified wave operator for nonlinear Klein-Gordon equations