RIMS Workshop

on

Mathematical Analysis in Fluid and Gas Dynamics

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

Date : from July 11 to $13\ 2007$

Venue : RIMS, Kyoto University, Room No. 420

Program

| Wednesday, July 11 | |
|--------------------|---|
| 14:00~14:50 | Kenji Nakanishi (Kyoto Univ.) Global behavior of solutions for the Gross-Pitaevskii equation |
| 15:00~15:50 | Hideyuki Miura (Kyoto Univ.) Remark on decay estimates for solutions to the critical dissipative quasi-geostrophic equations |
| 16:00~16:50 | Soichiro Katayama (Wakayama Univ.) A new approach to the null condition for nonlinear wave equations |
| 17:00~17:50 | Makoto Hirota (Kyushu Univ.) Spectrum and energy of waves in mean shear flows |
| Thursday, July 12 | |
| 10:00~10:50 | Norikazu Yamaguchi (Waseda Univ.) On a Stokes approximation of two dimensional Oseen flow near the boundary |
| 11:00~11:50 | Takayuki Kubo (Waseda Univ.) Navier-Stokes flow in an aperture domain |

| 14:00~14:50 | Ha Seung-Yeal (Seoul National Univ.) $L^2\text{-stability theory for the space-inhomogeneous Boltzmann equation near a global maxwellian}$ |
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| 15:00~15:50 | Hiroshi Sugimoto (Kyoto Univ.) Rarefied gas flows induced by temperature fields and their applications |
| 16:10~17:00 | Takeru Yano (Hokkaido Univ.) Steady solution of the Boltzmann equation for evaporation and condensation on a planar interface with a general boundary condition |
| Friday, July 13 | |
| 10:00~10:50 | Jing Li (Osaka Univ.) Vanishing of vacuum of the compressible Navier-Stokes equations |
| 11:00~11:30 | Morimichi Umehara, Atusi Tani (Keio Univ.) Global solvability and some uniform-in-time bounds of the solution for self-gravitating viscous stellar models |
| 11:40~12:10 | Masakazu Kato (Osaka Univ.) Sharp asymptotics for the generalized Burgers equations |
| 13:50~14:20 | Tomoyuki Suzuki (Osaka Univ.) On regularity of suitable weak solutions to the Navier-Stokes equations in unbounded domains |
| 14:30~15:00 | Naoto Nakano (Keio Univ.) An initial-boundary value problem for motion of incompressible inhomogeneous fluid-like bodies |
| 15:10~16:00 | Tetsuro Miyakawa (Kanazawa Univ.) On weighted estimates for the Navier-Stokes flows over a 3-dimensional exterior domain |