「Fluids and Maximal Regularity」

 $\textbf{Date} \quad \text{September 9th(Mon) - 11th(Wed), 2024}$

会場 Lecture room 110, Science Department 3rd Building, Kyoto University

Program

10:00 ~ 10:50	Herbert Amann (Universität Zürich) Cusps, corners, and maximal regularity
11:00 ~ 11:50	Ryo Takada (The University of Tokyo) Existence of solutions to the fractional semilinear heat equation with a singular inhomogeneous term
14:00 ~ 14:50	Peer Christian Kunstmann (Karlsruher Institut für Technologie) Functional calculi for Stokes operators with different boundary conditions
$15:00 \sim 15:50$	Miho Murata (Shizuoka University) Unique solvability for a Q-tensor model in the maximal regularity class
$15:50 \sim 16:20$	coffee break
16:20 ~ 17:10	Yoshiyuki Kagei (Tokyo Institute of Technology) On the stability of bifurcating periodic patterns of the compressible Navier-Stokes equations

September 10th (Tue)

$10:00 \sim 10:50$	Matthias Hieber (TU Darmstadt) Analysis of Geophysical Flows
11:00 ~ 11:50	Ken Abe (Osaka Metropolitan University) Stability of Chandrasekhar's nonlinear force-free fields
14:00 ~ 14:50	Raphaël Danchin (Université Paris-Est-Créteil Val-de-Marne) The two-dimensional incompressible inhomogeneous Navier-Stokes equations with rough density via dynamic interpolation

 $15:00 \sim 15:50 \qquad \text{Itsuko Hashimoto (Kanazawa University/Osaka Metropolitan University)}$ Inviscid limit problem of radially symmetric stationary solutions for compressible Navier-Stokes equation

 $15:50 \sim 16:20$ coffee break

 $16:20 \sim 17:10$ Takayoshi Ogawa (Waseda University) Endpoint maximal regularity and application to the fluid dynamics

September 11th (Wed)

- $10:00 \sim 10:50$ Paolo Maremonti (Università degli Studi della Campania "L. Vanvitelli") On the Navier-Stokes equations: a possible gap related to the energy equality of a weak solution
- $11:00 \sim 11:50$ Tsukasa Iwabuchi (Tohoku University)
 On the uniqueness for the two-dimensional surface quasi-geostrophic equation
- $14:00 \sim 14:50$ Yasunori Maekawa (Kyoto University) Local rigidity of the Couette flow for the stationary triple-deck equations
- $15:00 \sim 15:50$ Erika Ushikoshi (Yokohama National University)

 Helmholtz-Weyl decomposition on a time dependent domain with an application to time periodic Navier-Stokes flows with large flux
- $15:50 \sim 16:20$ coffee break
- $16:20 \sim 17:10$ Takayuki Kobayashi (Osaka University) On the diffusion wave property for the solutions to the compressible Navier-Stokes-Korteweg system

Sponsors

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