

Mathematical Analysis on Fluid Dynamics and Conservation Laws

Organizers Masashi Ohnawa
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Date : September 23rd–24th, 2022
Venue : Online (Zoom)

Program

Friday, September 23

- 13 : 25~13 : 30 Opening
- 13 : 30~14 : 20 Takeshi Gotoda (Tokyo Institute of Technology, Japan)
Vortex motions in the 2D filtered Euler flow
- 14 : 30~15 : 20 Shugo Yasuda (University of Hyogo, Japan)
Numerical study of the volcano effect in chemotactic aggregation based
on a kinetic transport equation with non-instantaneous scattering
- 15 : 40~16 : 10 Naotaka Shigeta (Graduate of Tokyo Institute of Technology, Japan)
(A lecture in Japanese) 西畑研での研究と就職後の企業経験 (Research at
Nishihata Laboratory and work experience after employment)

Saturday, September 24

- 10 : 00~10 : 50 Hideyuki Miura (Tokyo Institute of Technology, Japan)
Local regularity conditions on initial data for weak solutions to the in-
compressible Navier-Stokes equations
- 11 : 00~11 : 50 Peicheng Zhu (Shanghai University, China)
Global Existence of Weak Solutions to An IBVP of a Phase-Field Model
for Motion of Grain Boundaries
- 13 : 30~14 : 20 Jin Takahashi (Tokyo Institute of Technology, Japan)
Critical norm blow-up for a supercritical semilinear heat equation
- 14 : 30~15 : 20 Morimichi Umehara (University of Miyazaki, Japan)
Steady and spherically symmetric flows of a viscous heat-conducting and
self-gravitating gas bounded by the free-surface
- 15 : 40~16 : 30 Shih-Hsien Yu (Academia Sinica, Taiwan)
Transmission, Reflection, and Heat equation with heterogeneous media
- 16 : 30~16 : 45 Closing
- 16 : 45~ Free discussion