

RESEARCH ACTIVITIES 2015

Go Takahashi

I. Papers

II. Presentations

- [1] *Partial Regularity and Extension of Solutions to the Navier-Stokes Equations*, IRTG seminar Mathematical Fluid Dynamics, TU Darmstadt(Germany) July 7.
- [2] *Extension criterion via Morrey type functional on solutions to the Navier-Stokes equations*, Mathematics for Nonlinear Phenomena: Analysis and Computation International Conference in honor of Professor Yoshikazu Giga on his 60th birthday, Sapporo (Japan) August 16.
- [3] *On Extension of Solutions to the Navier-Stokes Equations*, SPP 1506 Transport Processes at Fluidic Interfaces IRTG 1529 Mathematical Fluid Dynamics JSPS Program of The Japanese-German Graduate Externship "Mathematical Fluid Dynamics", Darmstadt (Germany) October 7.
- [4] *Partial regularity and extension of solutions to the Navier-Stokes equations*, Mathematical Analysis of Viscous Incompressible Fluid, Kyoto University (Japan) November 18.
- [5] *On partial regularity and extension of solutions to the Navier-Stokes equations*, The 12th Japanese-German International Workshop on Mathematical Fluid Dynamics, Waseda University (Japan), March 3.

III. Results

I established a time-extension criterion which means local-in-time classical solutions can be continued beyond the final time if a certain local Morrey-type functional of the solutions is sufficiently small near the final time.