

Qualitative properties for nonlinear diffusion equations

Period: January 22nd (Wednesday) 9:50 – 23rd (Thursday) 17:00

Place: Lecture Room 056, Graduate School of Mathematical Sciences,
Komaba 1 Campus, The university of Tokyo

January 22nd

9:50 – 10:00 opening

10:00 – 11:00 Matteo Bonforte (Universidad Autónoma de Madrid, Spain)
Nonlinear and nonlocal degenerate diffusions on bounded domains I

11:20 – 12:20 Yoshikazu Giga (The University of Tokyo)
On total variation flow under dynamic boundary conditions

12:20 – 14:00 lunch

14:00 – 15:00 Goro Akagi (Tohoku University)
Exponential stability of traveling waves for a constrained Allen-Cahn equation

15:20 – 16:00 Kotaro Hisa (Tohoku University)
Existence of solutions for an inhomogeneous fractional semilinear heat equation

16:10 – 17:10 Eiji Yanagida (Tokyo Institute of Technology)
Singularities of solutions for the heat equation with a dynamic Hardy potential

January 23rd

- 10:00 – 11:00 Matteo Bonforte (Universidad Autónoma de Madrid, Spain)
Nonlinear and nonlocal degenerate diffusions on bounded domains II
- 11:20 – 12:20 Paolo Salani (Università di Firenze, Italy)
Around concavity properties and heat transfer
- 12:20 – 14:00 lunch
- 14:00 – 14:50 Asuka Takatsu (Tokyo Metropolitan University)
Elliptic and parabolic boundary value problems on rotationally symmetric domains
- 15:00 – 15:50 Masahiko Shimojo (Okayama University of Science)
Blow-up of radially symmetric solutions for a semilinear heat equation on hyperbolic space
- 16:00 – 16:50 Yohei Fujishima (Shizuoka University)
Optimal singularities of initial functions for the solvability of a semilinear parabolic system
- 16:50 – 17:00 closing

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