Geometric Aspects of Partial Differential Equations

Dates: December 7 (Mon) – 9 (Wed), 2026

Venue: Room 420, Research Institute for Mathematical Sciences, Kyoto University

Organizers: Daisuke Naimen (Muroran Institute of Technology)
Takashi Kagaya (Muroran Institute of Technology)

Program

December 7 (Mon)

13:35 Opening

13:40 – 14:30 Yoshihiro Tonegawa (Institute of Science Tokyo)
Some recent existence and regularity results of the Brakke flow

14:50 – 15:40 Erbol Zhanpeisov (Tohoku University)
Blow-up rate for the subcritical semilinear heat equation in non-convex domains

16:00 – 16:50 Hiroaki Kikuchi (Tsuda University)
Singular solutions and bifurcation diagram of semilinear elliptic equations with general nonlinearity in two dimensions

December 8 (Tue)

10:00 – 10:50 Masato Hashizume (The University of Osaka)
Asymptotic properties of maximizers for a Trudinger-Moser inequality with a scale parameter

11:00 – 11:50 Gabriele Mancini (University of Bari Aldo Moro)
Existence of symmetric solutions for a class of almost critical problems on an annulus

11:50 – 13:40 Lunch

13:40 – 14:30 Goro Akagi (Tohoku University)
Optimal rate of convergence to non-isolated asymptotic profiles for fast diffusion on bounded domains

14:50 – 15:40 Yoshihito Kohsaka (Kobe University)
Variational framework of a thresholding algorithm for Willmore-type flows

16:00 – 16:50 Tim Laux (Heidelberg University)
Convergence of a vector-valued Allen-Cahn system to Brakke's multiphase mean curvature flow

December 9 (Wed)

10:00 – 10:50 Sho Katayama (Keio University)
Construction of boundary singular solutions to a semilinear elliptic equation

11:00 – 11:50 Futoshi Takahashi (Osaka Metropolitan University)
The Hardy inequality with logarithmic weights in a critical case

11:50 Closing

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Contact: Daisuke Naimen (naimen@muroran-it.ac.jp)
Takashi Kagaya (kagaya@muroran-it.ac.jp)