# RIMS workshop

## "Analysis on Shapes of Solutions to Partial Differential Equations"

June 5 (Mon.) – 7 (Wed.), 2017 Room 420, Research Institute for Mathematical Science (RIMS), Kyoto University

Organizers:

Shinya Okabe (Tohoku University) Norisuke Ioku (Ehime University)

### --Program--

#### Jun. 5th Mon.

13:45 Opening

13:50 – 14:40 Yoshihiro Tonegawa (Tokyo Institute of Technology)

A time-discrete approximate scheme for multi-phase mean curvature flow

15:00 – 15:50 Lorenzo Cavallina (Tohoku University)

Local optimality of radially symmetric configurations for the two-phase torsion problem in the ball

16:10 – 17:00 Michinori Ishiwata (Osaka University)

On the global bounds for Sobolev norms of solutions for semilinear parabolic equation involving critical Sobolev exponent

#### Jun. 6th Tue.

10:00 – 10:50 Keisuke Takasao (University of Tokyo)

Existence of weak solutions for mean curvature flow with a non-local term

11:10 – 12:00 Anna Dall'Acqua (University of Ulm)

The elastic flow of curves in the hyperbolic plane

12:00 - 13:50 Lunch

13:50 – 14:40 Jun-ichi Segata (Tohoku University)

Existence of a minimal non-scattering solutions to the mass-subcritical generalized Korteweg-de Vries equation

15:00 – 15:50 Takasi Senba (Fukuoka University)

Behavior of solutions to a chemotaxis system with general sensitivity function

16:10 – 17:00 Björn Gustafsson (Royal Institute of Technology)

Laplacian growth on a branched Riemann surface

18:30 – Banquet

#### Jun. 7th Wed.

10:00 – 10:50 Junichi Harada (Akita University)

Exact blow-up profile for a heat equation with a nonlinear boundary condition

11:10 – 12:00 Luca Martinazzi (University of Basel)

The fractional Liouville equation in dimension 1 - Geometry, compactness and quantization

12:00 Closing

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