# Eighth Euro-Japanese Workshop on Blow-up

Mathematical Institute, Tohoku University, Sendai, Japan, June 4 (Mon) - 8 (Fri), 2018

## Program

## June 4 (Mon)

13:15 - Opening

13:20 - 14:00 Peter Poláčik

Some classification and Liouville-type theorems for the Fujita equation

14:10 - 14:50 Hiroyuki Takamura

The "wave-like" blow-up for nonlinear wave equations with the scattering damping

14:50 - 15:10 Break

15:10 - 15:50 Yukihiro Seki

Construction of refined type II blow-up solutions of the Fujita equation and its applications

16:00 - 16:40 Robert Laister

Existence, uniqueness and blow-up in semilinear heat equations

16:50 - 17:30 Masahiko Shimojo

Asymptotic behavior of solutions to the logarithmic diffusion equation

18:30 - Welcome party

#### June 5 (Tue)

10:20 - 11:00 Yasuhito Miyamoto

Intersection number and applications for semilinear elliptic equations with general supercritical growth

11:10 - 11:50 Johannes Lankeit

On a nonlocal degenerate parabolic equation

11:50 - 13:20 Lunch

13:20 - 14:00 Goro Akagi

Convergence of solutions for fractional Cahn-Hilliard systems

14:10 - 14:50 Tatsuki Kawakami

The large diffusion limit for the heat equation with a dynamical boundary condition

14:50 - 15:10 Break

15:10 - 16:10 Short Communications

Carlos Esteve

Touchdown behavior for the MEMS problem with variable dielectric permittivity

Jin Takahashi

Solutions with time-dependent singular sets for the heat equation with absorption

Van Tien Nguyen

On Type I singularities in semilinear parabolic problems

16:20 - 18:00 Poster session

#### June 6 (Wed)

10:20 - 11:00 Grzegorz Karch

Blowup criteria for the parabolic-elliptic model of chemotaxis

11:10 - 11:50 Takasi Senba

Behavior of solutions to an indirect chemotaxis system

Free discussion

#### June 7 (Thu)

10:20 - 11:00 Flavio Dickstein

Existence of self-similar solutions of the nonlinear heat equation with large initial positive data

11:10 - 11:50 Kenji Nakanishi

Global dynamics of the conformal focusing wave equation

11:50 - 13:20 Lunch

13:20 - 14:00 Eiji Yanagida

Blow-up of sign-changing solutions for a one-dimensional semilinear parabolic equation

14:10 - 14:50 Philippe Souplet

Reaction-diffusion systems with dissipation of mass: old and new results

14:50 - 15:10 Break

15:10 - 15:50 Michinori Ishiwata

On the bounds of the Sobolev norm for solutions of semilinear parabolic problems with critical Sobolev exponent

16:00 - 17:00 Short Communications

Kentarou Fujie

New Lyapunov-like functional of 1D quasilinear Keller-Segel system and its application

Mikołaj Sierzega

Pohozaev type identities through special variations

Junichi Harada

Profile of blowup solutions to the heat equation with nonlinear boundary condition

### June 8 (Fri)

10:20 - 11:00 Hiroshi Matano

Existence of a multi-soliton solution for the critical nonlinear heat equation

11:10 - 11:50 Marek Fila

A Gagliardo-Nirenberg-type inequality and its applications to decay estimates for solutions of a degenerate parabolic equation

11:50 - Closing