Workshop on

Nonlinear Partial Differential Equations

Japan-China Joint Project for Young Mathematicians 2013

October 25-27, 2013

Venue: Room 101, Building 21, Fukakusa Campus, Ryukoku University http://www.ryukoku.ac.jp/english2/about/access/fukakusa.html

Program

October 25 (Friday)

9:25 - 9:30 **Opening**

9:30 – 10:10 **Baojun Bian** (Tongji University)

Convexity for solution of partial differential equation and applications

10:15 – 10:55 **Yasuhito Miyamoto** (University of Tokyo)

Structure of the positive radial solutions for a supercritical Neumann problem in a ball

11:00 - 11:15 **Break**

11:15 – 11:55 **Xiangao Liu** (Fudan University)

Problem and development for the flow of compressible liquid crystals system

12:00 – 12:40 Kanako Suzuki (Ibaraki University)

Instability and blowup phenomena induced by diffusion in a model of pattern formation

12:45 - 14:15 **Lunch**

14:15 – 14:55 **Youshan Tao** (Donghua University)

On a chemotaxis-Stokes model

15:00 – 15:40 **Toru Kan** (Tokyo Institute of Technology)

On the structure of solutions to the Liouville equation in non-simply connected domains

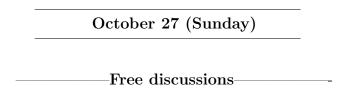
15:45 - 16:00 **Break**

- 16:00 16:40 **Jun Chen** (Fujian Agriculture and Forestry University) Quasilinear systems involving operator curl
- 16:45 17:25 **Tomoyuki Miyaji** (Kyoto University) Steady-state mode interactions in the Lugiato-Lefever equation

19:00 - 21:00 **Party**

October 26 (Saturday)

- 9:20 10:00 **Kyoko Tomoeda** (Setsunan Univesity)
 - Optimal Korn's inequality for solenoidal vector fields on a periodic slab with some applications
- 10:05 10:45 **Xiaoping Yang** (Nanjing University of Science and Technology) Nodal and singular sets for solutions to some elliptic equations
- 10:50 11:05 **Break**
- 11:05 11:45 **Masashi Mizuno** (Nihon University) Boundary behavior of the singular limit of the Allen-Cahn equation on convex domains
- 11:50 12:30 **Feng Zhou** (East China Normal University) Symmetry results for entire solutions of a bi-harmonic equation
- 12:35 12:40 **Closing**
- 14:00 Free discussions



This workshop is sponsored by Joint Research Center for Science and Technology of Ryukoku University. It is also supported in part by JSPS KAKENHI Grant Numbers 22340022, 24654044.

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