

Chemotaxis and Nonlinear Parabolic Equations
–In honor of Professor Takasi Senba on his 60th birthday–

Date: Nov. 6th (Wednesday) – Nov. 8th (Friday), 2019

Venue: Kitakyushu International Conference Center, 2F

Address: 3-9-30 Asano, Kokurakita-ku, Kitakyushu-shi, Fukuoka 802-0001

Wednesday, Nov. 6th

13:20 – 13:50 Registration

13:50 – 13:55 Opening

14:00 – 14:50 Grzegorz Karch (*Uniwersytet Wrocławski*)

Variations on Kurokiba-Ogawa approach to model of chemotaxis

15:00 – 15:50 Hiroshi Wakui (*Uniwersytet Wrocławski*)

Self-similar solution to a problem of a model of chemotaxis in higher dimensions

16:10 – 17:00 Sachiko Ishida (*Chiba University*)

Boundedness and weak stabilization in Keller-Segel systems with porous medium diffusion

17:10 – 18:00 Goro Akagi (*Tohoku University*)

Traveling wave dynamics for Allen-Cahn equations with non-decreasing constraints

Thursday, Nov. 7th

10:00 – 10:50 Youshan Tao (*Shanghai Jiao Tong University*)

Boundedness and stabilization in a triangular cross-diffusion system

10:50 – 11:10 Coffee break

11:10 – 12:00 Tomasz Cieślak (*Institute of Mathematics, Polish Academy of Sciences*)

Fully parabolic chemorepulsion

Lunch break

14:00 – 14:50 Tetsuya Yamada (*National Institute of Technology, Fukui College*)

Global existence and blow up of solutions to an attraction–repulsion chemotaxis system in the balance case

- 15:00 – 15:50 Yuusuke Sugiyama (*The University of Shiga Prefecture*)
Stationary and nonstationary problems for the drift-diffusion equation with fractional dissipation
- 16:10 – 17:00 Masakazu Yamamoto (*Niigata University*)
Spatial decay of solutions to anomalous diffusion equation
- 17:10 – 18:00 Takayoshi Ogawa (*Tohoku University*)
Singular limit problem for the Keller-Segel equation to the drift-diffusion system in a critical setting

Friday, Nov. 8th

- 10:00 – 10:50 Messoud Efendiev (*University of Waterloo/Helmholtz Zentrum München*)
Finite dimensional dynamics of a degenerate chemotaxis system
- 10:50 – 11:10 Coffee break
- 11:10 – 12:00 Philippe Laurençot (*Institut de Mathématiques de Toulouse, CNRS*)
Dynamics of a chemotaxis system with indirect signal production
Lunch break
- 14:00 – 14:50 Kimie Nakashima (*Tokyo University of Marine Science and Technology*)
Uniqueness of indefinite nonlinear diffusion problem in population genetics
- 15:10 – 16:00 Kazuhiro Ishige (*The University of Tokyo*)
Existence of solutions for a higher-order semilinear parabolic equation with singular initial data
- 16:20 – 17:10 Yūki Naito (*Ehime University*)
Blow-up criteria for the simplest Keller-Segel model of chemotaxis in higher dimensions
- 17:10 – Free discussion

Organizers:

- Masaki Kurokiba (*Muroran Institute of Technology*)
Tohru Wakasa (*Kyushu Institute of Technology*)
Kentarou Fujie (*Tohoku University*)

This conference is supported by the following funds:

- JSPS Grand-in-Aid for Scientific Research (S), 19H05597 (Takayoshi Ogawa)
JSPS Grand-in-Aid for Scientific Research (C), 19K03555 (Masaki Kurokiba)