

International Workshop on Nonlinear PDEs 2016 in Osaka

I-site Namba, Osaka Prefecture University
December 7–9, 2016

Organizers:

Yoshitsugu Kabeya (Osaka Prefecture University)

Ryuji Kajikiya (Saga University)

Yuki Naito (Ehime University)

Satoshi Tanaka (Okayama University of Science)

Eiji Yanagida (Tokyo Institute of Technology)

December 7 (Wednesday)

- 14:00–14:40 Catherine Bandle (University of Basel)
Semilinear elliptic equations with a Hardy potential
- 14:50–15:30 Futoshi Takahashi (Osaka City University)
Some Trudinger-Moser type inequalities on the whole space and their
(non-)existence of maximizers
- Break
- 15:50–16:30 Soohyun Bae (Hanbat National University)
Asymptotic behavior of entire solutions for elliptic equations with
exponential nonlinearity
- 16:40–17:20 Tetsutaro Shibata (Hiroshima University)
Direct and inverse bifurcation problems for semilinear equations

December 8 (Thursday)

- 10:20–11:00 Masaharu Taniguchi (Okayama University)
An $(N - 1)$ -dimensional convex compact set gives an N -dimensional
traveling front
- 11:10–11:50 Yongjung Kim (KAIST)
Coexistence of prey and predator species obtained from finite time
extinction
- 12:00–12:40 Kazuhiro Ishige (Tohoku University)
Existence of solutions for a fractional semilinear parabolic equation with
singular initial data
- Lunch

- 14:00–14:40 Minkyu Kwak (Chonnam National University)
Serrin type regularity criteria for 3D Navier-Stokes equations
- 14:50–15:30 Yoshiyuki Kagei (Kyushu University)
On the linear artificial compressible system
Break
- 15:50–16:30 Ki-Ahm Lee (Seoul National University)
Nonlinear Eigen value problems
- 16:40–17:20 Tatsuki Kawakami (Osaka Prefecture University)
Asymptotic behavior and decay estimates of the solutions for a nonlinear parabolic equation with exponential nonlinearity

December 9 (Friday)

- 10:20–11:00 Shingo Takeuchi (Shibaura Institute of Technology)
Arithmetic properties of eigenfunctions of the one-dimensional p -Laplacian
- 11:10–11:50 Inbo Sim (University of Ulsan)
On semipositone p -Laplacian problems
Lunch
- 13:30–14:10 Michinori Ishiwata (Osaka University)
On the compactness of the embedding $H_0^1(\Omega) \hookrightarrow L^{p(\cdot)}$
- 14:20–15:00 Daisuke Naimen (Muroran Institute of Technology)
Two positive solutions of a Kirchhoff type elliptic problem with critical nonlinearity in high dimension
Break
- 15:20–16:00 Naoki Shioji (Yokohama National University)
Uniqueness of positive solutions of Brezis-Nirenberg problems on the hyperbolic space

This workshop is supported by

JSPS Grant-in-aid for Scientific Research, Basic Research A (E. Yanagida) No. 24244012
Osaka Prefecture University