

RIMS workshop
**Global qualitative theory of ordinary differential equations and
its applications**

November 7–9, 2012

Room 111, Research Institute for Mathematical Sciences (RIMS), Kyoto University

Organizing Committee
Satoshi Tanaka (Okayama University of Science)
Hiroyuki Usami (Gifu University)
Yūki Naito (Ehime University)

November 7 (Wednesday)

- 13:00~13:50 Shin-Hwa Wang (National Tsing Hua University)
Global bifurcation curves and exact multiplicity of positive solutions for a
positone multiparameter problem with cubic nonlinearity
- 14:00~14:50 Kuo-Chih Hung (National Tsing Hua University)
Global bifurcation diagrams and exact multiplicity of positive solutions for a
one-dimensional prescribed mean curvature problem arising in MEMS models
- 15:00~15:50 Mervan Pašić (University of Zagreb)
Blow-up and pointwise comparison principles for the generalized Riccati
differential equation and application to oscillation of some general classes of
nonlinear differential equations of second-order
- 16:00~16:50 Darko Žubrinić (University of Zagreb)
Lapidus zeta functions of arbitrary fractals and compact sets in Euclidean spaces

November 8 (Thursday)

- 9:40~10:30 Atsushi Kosaka (Osaka Prefecture University)
Existence and nonexistence of solutions to the Emden-Fowler equation on a
geodesic ball in S^N
- 10:40~11:30 Naoki Shioji (Yokohama National University)
Uniqueness of positive radial solutions of $\Delta u + g(r)u + h(r)u^p = 0$ and its
applications

- 11:40~12:30 Shingo Takeuchi (Shibaura Institute of Technology)
Generalized Jacobian elliptic functions with applications to p -Laplacian bistable problems
- 14:00~14:50 Kousuke Kuto (University of Electro-Communications)
Bifurcation structure of stationary layers for generalized Allen-Cahn equations with nonlocal constraint
- 15:00~15:50 Shoji Yotsutani (Ryukoku University)
Multiplicity of solutions in the Lotka-Volterra competition with cross-diffusion
- 16:00~16:50 Chiun-Chuan Chen (National Taiwan University)
A simple model of spot self-replication
- Banquet (18:00~)

November 9 (Friday)

- 9:40~10:30 Hideaki Matsunaga (Osaka Prefecture University)
Formal adjoint operators and asymptotic formula for solutions of integral equations
- 10:40~11:30 Satoru Murakami (Okayama University of Science)
Center manifold theorem for integral equations
- 11:40~12:30 Paul Binding (University of Calgary)
Pruefer's transformation

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Basic Research (C) No. 23540196 (Hiroyuki Usami)
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