数理解析研究所講究録 1588

非線形発展方程式と現象の数理

Nonlinear Evolution Equations

and Mathematical Modeling

April, 2008

Research Institute for Mathematical Sciences

Kyoto University, Kyoto, Japan

Symposium on

Nonlinear Evolution Equations and Mathematical Modeling

Organized by Yoshio Yamada
(Waseda University)

Date & Time: October 22, 2007 (Monday) 13:30∼
October 24, 2007 (Wednesday) 11:50

Place: Research Institute for Mathematical Sciences,
Kyoto University

Program

October 22 (Monday)

13:30∼14:20   Akio Ito (Kinki Univ.)
Mathematical treatment of tumor invasion phenomena

14:30∼15:20   Tetsuya Ishiwata (Gifu Univ.) and Shigetoshi Yazaki (Miyazaki Univ.)
Interface motion of a negative crystal

15:30∼16:20   Katsuya Inui (Keio Univ.), Atsushi Tani (Keio Univ.) and
Shin'ya Matsui (Hokkaido Information Univ.)
On time local solvability for the motion of an unbounded volume
of viscous incompressible fluid

16:30∼17:20   Vladimir Fedorov (Chelyabinsk State Univ.)
Research of a class of nonlinear Sobolev type equations and its
applications for mathematical physics

October 23 (Tuesday)

10:00～10:50 Junichi Harada (Waseda Univ.)
Regularity of solutions for some elliptic equations with nonlinear
boundary conditions

11:00～11:50 Yoshitsugu Kabeya (Osaka Prefecture Univ.)
Imperfect bifurcations arising in a nonlinear elliptic equation on
a spherical cap

11:50～13:30 — Lunch —

13:30～14:20 Kazuhiro Oeda (Waseda Univ.)
Stationary patterns for a cooperative model with nonlinear diffusion

14:30～15:20 Masaki Hoshino (Tohoku Univ.)
Sharp estimates of the convergence rate for a semilinear parabolic
equation with supercritical nonlinearity

15:30～16:20 Atsushi Yagi (Osaka Univ.) and Gianluca Mola (Milano Polytechinics)
Dynamical system for forest model with memory

16:30～17:20 Tohru Tsujikawa (Miyazaki Univ.)
Interactive dynamics of two interfaces in a reaction diffusion system

— Banquet —

October 24 (Wednesday)

10:00～10:50 Shota Sato (Tohoku Univ.)
Existence of solutions with moving singularities for a semilinear
parabolic equation

11:00～11:50 Noriaki Umeda (Tokyo Univ.)
On blow-up at space infinity for nonlinear heat equations

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RIMS 研究集会報告集

２００７年１０月２２日～１０月２４日
研究代表者　　山田　義雄 (Yoshio　Yamada)

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