Functional Analysis and Applications

– Evolution Equations and Control Theory –

In honor of Prof. Shin-ichi Nakagiri on the occasion of his retirement

Kobe University, Kobe, Japan

February 11 – 13, 2013

Scientific Committee:

Minoru Tabata (Osaka Prefecture University)
Yuki Naito (Ehime University)
Ken Shirakawa (Chiba University)

Organizing Committee:

Takao Nambu (Kobe University)
Hideki Sano (Kobe University)
Goro Akagi (Kobe University)

Website: `http://www2.kobe-u.ac.jp/~akagi56/conf/faa12/`

Date and Venue

Date: February 11-13, 2013

Venue: Takikawa Memorial Hall, Kobe University,
    1-1 Rokkodai-cho, Nada-ku, Kobe 657-8501 JAPAN

Program

Monday: 11 February

13:00 − 13:10 Opening

13:10 − 13:50 Motofumi Hattori (Kanagawa Institute of Technology, Japan)
Numerical simulations for the Navier-Stokes equation by moving particle semi-implicit method

13:55 − 14:35 Hiroki Hoshino (Fujita Health University, Japan)
Perturbations of smooth traveling wave solutions to a mathematical model of malignant tumor invasion

14:40 − 15:20 Fumio Kojima (Kobe University, Japan)
Reliability assessment of nondestructive testing using probability of detection

15:20 − 15:35 Coffee Break

15:35 − 16:15 Masahiro Yamamoto (The University of Tokyo, Japan)
Observability, approximate controllability, identifiability and inverse problems for fractional diffusion equations

16:20 − 17:00 Junhong Ha (Korea University of Technology and Education, Korea)
Stability of shallow archs with the time independent symmetric load

17:05 − 17:45 Seungjae Lee and Sudeok Shon
(Korea University of Technology and Education, Korea)
Nonlinear dynamic analysis of multistage Homotopy Perturbation Method

Tuesday: 12 February

09:00 − 09:40 Koji Kikuchi (Shizuoka University, Japan)
A Remark on an evolution equation having a strong viscosity term

09:45 − 10:25 Takashi Senba (Kyushu Institute of Technology, Japan)
On the behavior of radial solutions to a simplified Keller-Segel system

10:25 − 10:40 Coffee Break

10:40 − 11:20 Kimiaki Narukawa (Naruto University of Education, Japan)
Global results on the existence of positive solutions for quasilinear elliptic equations with nonlinear boundary conditions

11:25 − 12:05 Tadashi Kawanago (Tokyo Institute of Technology, Japan)
Remarks on some Hopf bifurcation theorems

12:05 − 13:45 Lunch Break

13:45 − 14:25 Shoji Yotsutani (Ryukoku University, Japan)
Linearized eigen-value problem arising in a cross-diffusion system

14:30 − 15:10 Yoshio Yamada (Waseda University, Japan)
On logistic diffusion equations with nonlocal effects

15:10 − 15:25 Coffee Break

15:25 − 16:05 Hiroki Tanabe (Professor Emeritus at Osaka University, Japan)
Retarded functional differential equations of degenerate type

16:10 − 16:50 Atsushi Yagi (Osaka University, Japan)
Stochastic Forest Model

16:55 − 17:35 Shin-ichi Nakagiri (Kobe University, Japan)
Structural properties of solution semigroups for hyperbolic Volterra integro-differential systems

19:00 − 21:00 Banquet

Wednesday: 13 February

10:00 − 10:40 Goro Akagi (Kobe University, Japan)
Stability analysis of asymptotic profiles for fast diffusion

10:45 − 11:25 Ken Shirakawa (Chiba University, Japan)
A nonstandard parabolic system associated with grain boundary motion

11:30 − 12:10 Katsuyuki Ishii (Kobe University, Japan)
An approximation scheme for the planar motion by crystalline curvature

12:10 − 13:45 Lunch Break

13:45 − 14:25 Yoshitsugu Kabeya (Osaka Prefecture University, Japan)
Structures of bifurcation diagrams for a nonlinear elliptic equaiton on a spherical cap

14:30 − 15:10 Yoshihisa Nakamura (Kumamoto University, Japan)
Scattering theory for the matrix-valued nonlinear Schrödinger equation

15:15 − 15:55 Takeshi Wada (Kumamoto University, Japan)
On well-posedness for nonlinear Schrödinger equations with power nonlinearity in fractional order Sobolev spaces

15:55 − 16:00 Closing