# The 2<sup>nd</sup> Chile-Japan Workshop on Nonlinear Elliptic and Parabolic PDEs

Date: December 1st - 4th, 2009

Place: Conference room on the 4th Floor,

Shikon-kan, Surugadai Campus, Meiji University 1-1 Kanda-Surugadai, Chiyoda-ku, Tokyo 101-8301

# Program:

## December 1st, 2009 (Tue)

Schedule	Speaker / Title
10:40 - 11:20	Raúl Manásevich (Universidad de Chile, Chile)
	"On existence of positive solutions to a quasilinear system in the
	subcritical case"
11:30 – 12:10	Masahito Ohta (Saitama University)
	"Stability of standing waves for a system of NLS with a three-wave
	interaction"
13:40 – 14:20	Ignacio Guerra (Universidad de Santiago, Chile)
	"Entire solutions for a nonlinear biharmonic equation with negative
	exponents"
14:30 – 15:10	Patricio Felmer (Universidad de Chile, Chile)
	"On the Landesman-Lazer condition for fully nonlinear elliptic
	equations"
15:30 – 16:10	Eiji Yanagida (Tohoku University)
	"Connecting orbits for a semilinear parabolic equation"
16:20 – 17:00	Shigeaki Koike (Saitama University)
	"Weak Harnack inequality for Lp-viscosity solutions of fully nonlinear
	PDEs with unbounded ingredients"

# December 2<sup>nd</sup>, 2009 (Wed)

Schedule	Speaker / Title
10:00 - 10:40	Marta García-huidobro (Universidad Católica de Chile, Chile)
	"On the uniqueness of higher bound state solutions of a semilinear
	equation"
10:50 - 11:30	Kazunaga Tanaka (Waseda University)
	"A local mountain pass type result for a system of nonlinear
	Schrödinger equations"
11:40 – 12:20	Juan Dávila (Universidad de Chile, Chile)
	"Multiple radial solutions of elliptic 4th order supercritical equation"
13:40 – 14:20	Kazuhiro Ishige (Tohoku University)
	"Blow-up for a semilinear parabolic equation with large diffusion on
	RN"
14:30 – 15:10	Manuel Del Pino (Universidad de Chile, Chile)
	"New solutions for phase transitions in entire space"
15:30 – 16:00	Norihisa Ikoma (Waseda University)
	"On radial solutions of inhomogeneous nonlinear field equations"
16:05 – 16:35	José Alberto Montero (Pontificia Universidad Católica de Chile, Chile)
	"Some remarks on the Landau-De Gennes energy functional"
16:40 – 17:10	Satoshi Tanaka (Okayama University of Science)
	"On the uniqueness of positive solutions of two-point BVPs of Emden-
	Fowler equations"

## December 3rd, 2009 (Thu)

Schedule	Speaker / Title
10:00 - 10:40	Monica Musso (Universidad Católica de Chile, Chile)
	"Finite-energy sign-changing entire solutions for semilinear elliptic
	equations"
10:50 - 11:30	Takashi Suzuki (Osaka University)
	"Point vortex turbulence - a recursive hierarchy"
11:40 – 12:20	Mariel Sáez Trumper (Universidad Católica de Chile, Chile)
	"Multiple-layered solutions to the elliptic Allen-Cahn equation in
	Hyperbolic Space"

13:40 – 14:10	Yasuhito Miyamoto (Tokyo Institute of Technology)
	"Stable patterns for shadow systems and a nonlinear "hot spots"
	conjecture"
14:15 – 14:45	Tatsuki Kawakami (Tohoku University)
	"On the heat equation in a half space with a nonlinear boundary
	condition"
14:50 - 15:20	Shota Sato (Tohoku University)
	"Singular backward self-similar solutions of a semilinear parabolic
	equation"
15:40 – 16:10	Chao-Nien Chen (National Changhua University of Education,
	Taiwan)
	"Some stability results for the FitzHugh-Nagumo type systems"
16:15 – 16:45	Takeshi Ohtsuka (Meiji University)
	"Surface evolution by Allen-Cahn type equation with unbalanced
	triple-well potential"
16:50 – 17:30	Mitsuharu Ôtani (Waseda University)
	"Infinite dimensionality of global attractors for some quasilinear
	parabolic equations"

# December 4th, 2009 (Fri)

Schedule	Speaker / Title
10:00 - 10:40	Alexander Quaas (Universidad Federico Santa Maria, Chile)
	"Critical exponent for fully nonlinear elliptic and parabolic equations"
10:50 - 11:30	Hiroshi Matano (University of Tokyo)
	"Homogenization limit of recurrent traveling waves in a 2D cylinder
	with saw-toothed boundary"
11:40 – 12:20	Izumi Takagi (Tohoku University)
	"Remarks on receptor-based models for pattern formation in hydra"
13:40 – 14:20	Hirokazu Ninomiya (Meiji University)
	"Some entire solutions of reaction-diffusion equations"
14:30 – 15:10	Michal Kowalczyk (Universidad de Chile, Chile)
	"The role of the Toda system in some semilinear elliptic problems in
	Rn"

#### Organizing Committee:

P. Felmer (Universidad de Chile), M. Kowalczyk (Universidad de Chile), M. Mimura (Meiji University, GCOE Program Leader), H. Ninomiya (Meiji University), M.D. Pino (Universidad de Chile), K. Tanaka (Waseda University), E. Yanagida (Tohoku University)

#### **Host Institution:**

Meiji Institute for Advanced Study of Mathematical Sciences (MIMS)

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