Workshop "Phase Transitions and Optimal Control"

October 23 – 25, 2008

Weierstrass Institute for Applied Analysis and Stochastics (WIAS), Berlin

– Program –

Thursday, October 23, 2008

08.00 – 08.50	**Registration**
08.50 – 09.00	**Welcome**
09.00 – 09.30	**N. Kenmochi (Chiba)** A variational inequality for grain boundary motion
09.35 – 10.05	**G. Dziuk (Freiburg)** Error analysis for the elastic flow of parametrized curves
10.10 – 10.40	**S. Zheng (Shanghai)** Convergence to equilibrium for parabolic-hyperbolic time-dependent Ginzburg-Landau-Maxwell equations
10.40 – 11.10	*– coffee break –*
11.10 – 11.40	**G. Gilardi (Pavia)** On a non-standard Allen-Cahn type problem
11.45 – 12.15	**A. Damlamian (Paris)** The periodic unfolding method as a mechanism to generate theorems
12.20 – 12.50	**A. Fasano (Florence)** Modelling bioremediation of polluted soils
12.50 – 14.20	*– lunch –*
14.20 – 14.50	**Ch. Elliott (Coventry)** Optimal control of the propagation of a graph
14.55 – 15.25	**R. Kornhuber (Berlin)** Multigrid and phase field models
15.30 – 16.00	*– coffee break –*
16.00 – 16.30	**M. Niezgódka (Warsaw)** Modelling of growth and transformations of complex structure in heterogeneous systems
16.35 – 17.05	**P. Neittaanmäki (Jyväskylä)** Fixed domain approaches in shape optimization problems

Friday, October 24, 2008

10.00 – 10.30	**K. Kunisch (Graz)** Optimal control of parabolic variational inequalities on bounded and unbounded domains
10.35 – 11.05	**S. Luckhaus (Leipzig)** Elastic free energies and statistical mechanics
11.05 – 11.35	*– coffee break –*
11.35 – 12.05	**D. Tiba (Bucharest)** Optimization of thin elastic structures
12.10 – 12.40	**J. Sokołowski (Nancy)** Shape optimization for compressible Navier-Stokes equations
12.40 – 14.10	*– lunch –*
14.10 – 14.40	**I. Müller (Berlin)** The symmetric hyperbolic field equations in extended thermodynamics
14.45 – 15.15	**M. Frémond (Rome)** Large deformations in mechanics
15.20 – 15.50	**E. Rocca (Milan)** Weak solutions to Frémond's full model of phase transitions
15.50 – 16.20	*– coffee break –*
16.20 – 16.50	**D. Kröner (Freiburg)** Dynamical phase transitions and interface conditions for two phase flows
16.55 – 17.25	**G. Hsiao (Newark)** On an inverse problem in fluid-structure interaction
17.30 – 18.00	**R.B. Guenther (Corvallis)** A potential theory for the boundary value problems of the unsteady equations of Stokes and Oseen

Saturday, October 25, 2008

09.00 – 09.30	**H. Gajewski/J.A. Griepentrog (Berlin)** On an energy model for nonlocal phase separation
09.35 – 10.05	**J.F. Rodrigues (Lisbon)** On an evolution quasi-variational inequality with gradient constraint
10.05 – 10.35	*– coffee break –*
10.35 – 11.05	**A. Mielke (Berlin)** Pseudoelasticity as limit of a bistable chain with small viscosity
11.10 – 11.40	**A. Krasnosel'skii (Moscow)** Criteria for resonance in systems with Preisach nonlinearities
	– end of the workshops –