

Program of the Workshop
Multiscale Problems in Three Applications

29.5. – 01.6.2007

Tuesday, May 29th

11:30 – 13:00	Registration
13:00 – 13:15	Welcome
13:15 – 13:55	A. Miranville , Poitiers <i>Asymptotic behavior of Cahn-Hilliard-Gurtin equations</i>
14:00 – 14:40	C. Kraus , Berlin <i>Equilibrium conditions of liquid–vapour systems and the thermodynamical consistency of the van der Waals–Cahn–Hilliard phase model</i>
14:45 – 15:30	Coffee Break
15:30 – 16:10	M. Röger , Leipzig <i>The Allen-Cahn action functional and its sharp interface limit</i>
16:15 – 16:55	B. Stinner , Falmer <i>Systems of Allen-Cahn equations with volume constraints</i>
17:00 – 20:00	Social Gathering

Wednesday, May 30th

9:00 – 9:40	C. Rohde , Stuttgart <i>A numerical method for a sharp-interface model for phase transitions in compressible flow</i>
9:45 – 10:25	L. Mugnai , Leipzig <i>From atomistic to continuum models of elasticity and plasticity, “Kac-potentials” as an intermediate step</i>
10:30 – 11:00	Coffee Break
11:00 – 11:40	A. Mielke , Berlin <i>Weak convergence and homogenization in Hamiltonian systems</i>
11:45 – 12:25	C. Patz , Berlin <i>On dispersive stability of Hamiltonian systems on lattices</i>
12:30 – 14:00	Lunch
14:00 – 14:40	P. Rosenau , Tel-Aviv <i>Macro-complexity Micro-simplicity and vice versa: Problems and Paradoxes</i>
14:45 – 15:25	A. Vainstein , Pittsburgh <i>Dynamics of steps along a martensitic phase boundary</i>
15:30 – 16:00	Coffee Break

Thursday, May 31st

9:00 – 9:40	O. Kastner , Bochum <i>Martensitic transformations in Lennard Jones Solids</i>
9:45 – 10:25	T. Böhme , Berlin <i>Determination of stiffness and higher gradient coefficients by means of the embedded atom method</i>
10:30 – 11:00	Coffee Break
11:00 – 11:40	M. Hantke , Magdeburg <i>On balance laws for mixture theories of disperse media with phase change</i>
11:45 – 12:25	J. Velazquez , Leipzig <i>Diffusive tails for the Becker-Döring model</i>
12:30 – 14:00	Lunch
14:00 – 14:40	J. Wattis , Nottingham <i>Self-similarity and scaling in nucleation problems</i>
14:45 – 15:25	M. Naldzhieva , Berlin <i>Modeling and analysis of evolution of droplets</i>
15:30 – 16:00	Coffee Break
16:00 – 16:40	C. Gohlke , Berlin <i>Non-linear elastic membrane shells for incompressible Mooney-Rivlin materials and non-linear phenomena of rubber</i>
16:45 – 17:25	B. Wagner , Berlin <i>Sharp-interface models for dewetting films</i>

Friday, June 1st

9:00 – 10:30	Time for Discussion
10:30 – 11:10	P. Rosenau , Tel-Aviv <i>Macro-complexity Micro-simplicity and vice versa: Problems and Paradoxes. Part II</i>
11:15 – 12:30	Time for Discussion
12:30 – 12:15	Closing