

**6.2.2013, 06.02.2013, 13:00 - 18:15**

13:00 - 14:00	Registration
14:00 - 14:15	Opening
14:15	<b>Günther Grün</b> On convergent schemes for diffuse interface models for two-phase flow of incompressible fluids with general mass densities
15:00	<b>Jan Giesselmann</b> (Program modification !) Modeling of compressible electrolytes with phase transition
15:30	<b>Frédéric Charve</b> Convergence of capillary fluid models: from non-local to local models
16:00 - 16:30	Coffee Break
16:30	<b>Elisabetta Rocca</b> Nonlocal Cahn-Hilliard-Navier-Stokes systems with nonconstant mobility
17:15	<b>Gabriele Witterstein</b> Incompressible Limit of Compressible Phase Change Flows
17:45	<b>Mirko Kränkel</b> Numerics for a compressible Allen-Cahn-Navier-Stokes-System

## Program

### 7.2.2013, 07.02.2013, 09:00 - 22:00

09:00	<b>Thomas Hillen</b> Spatio-temporal chaos in chemotaxis models
09:45	<b>Ee Han</b> Modelling phase transition for compressible multi-phase flows
10:15	<b>Edwige Godlewski</b> A possible hierarchy between a two-pressure bifluid model and a drift model: example of coupling of two models with different sizes
10:45 - 11:15	Coffee Break
11:15	<b>Boris Andreianov</b> Solutions of Buckley-Leverett equation in heterogeneous medium and their approximation
12:00	<b>Hélène Mathis</b> Error estimate based on relative entropy for finite volume approximations of smooth solutions to hyperbolic systems
12:30	<b>Mathieu Girardin</b> Asymptotic preserving numerical scheme for the gas dynamics equations in the low Mach limit
13:00 - 14:00	Lunch Break
14:00	<b>Frederic Coquel</b> Vanishing phase in Baer-Nunziato models and Entropy dissipation
14:45	<b>Christoph Zeiler</b> Curvature Driven Liquid-Vapour Flow with Phase Transition: Exact and Approximative Riemann Solvers
15:15	<b>Jochen Neusser</b> An order parameter model for phase transitions
15:45 - 16:00	Coffee Break
16:00	<b>Barbara Wagner</b> Exploring the limits: Evolution equations for interfaces at the nano scales
16:45	<b>Vincent Le Chenadec</b> A Volume-of-Fluid based framework for the Direct Numerical Simulation of turbulent primary atomization
17:15	<b>Bugra Kabil</b> The influence of surface tension and configurational forces on the stability of liquid-vapor interfaces
19:00 - 22:00	Dinner

**8.2.2013, 08.02.2013, 09:00 - 12:45**

09:00	<b>Athanasios Tzavaras</b> The onset of cavitation for the equations of polyconvex elasticity
09:45	<b>Christian Dickopp</b> Coupling of Elastic Solids with Compressible Two-Phase Fluids for the Numerical Investigation of Cavitation Damaging
10:15	<b>Jonathan Jung</b> Computing liquid-gas compressible flows on GPU
10:45 - 11:00	Coffee Break
11:00	<b>Boris Haspot</b> Existence of global strong solution and vanishing capillarity-viscosity limit in one dimension for the Korteweg system
11:30	<b>Marica Pelanti</b> A mixture-energy-consistent approximation of a two-phase flow model with liquid-vapor transition for the simulation of cavitating fluids
12:00	<b>Adam Larat</b> A high order realizability preserving Discontinuous Galerkin method for Eulerian simulation of spray transport on unstructured meshes
12:30 - 12:45	Closing