

Second Workshop: "Micro-Macro Modelling and Simulation of Liquid-Vapour Flows"

Institut de Mathématiques, Université Bordeaux I and INRIA, projet Scalaplix
Talence, France January, 10-12, 2007
Salle de Conférence

Wednesday 10, January 2007

Chairman : B. Nkonga

- 14–14:15 : Welcome and opening
- 14:15–15 :Keh-Ming Shyue :”A fluid–mixture type algorithm for compressible multicomponent flows : Eulerian versus Lagrangian–like Formulation”
- 15–15:30 : Siegfried Müller : “Numerical Simulation of Cavitation Bubbles by Compressible Two-Phase Fluids”,
- 15:30–16:00 : break
- 16:00–16:30 Paul Vigneaux : “About stability condition for bifluid flows with surface tension”
- 16:30–17:15 : Richard Saurel :“A hyperbolic system for metastable phase transition”

Thursday 11

Chairman : D. Kröner

- 9:15-10 : Sandro Manservigi : “A FEM variational approach to the drop spreading over dry surfaces”
- 10:–10:30 P. Helluy :”Comparison of several numerical methods for the computation of a liquid–bubble interaction”
- 10:30–11:00 : break
- 11:–11:30 : Alain Dervieux : “Mesh adaptive Variational Level Set ”

12–14 : lunch

Chairman : A. Dervieux

- 14–14:45 : Gerald Warnecke : “Homogenization methods for multi-phase mixtures with phase transition”
- 14:45–15:30 : Dennis Diehl : “Nonconservative Discontinuous Galerkin Discretization and Application to the Navier-Stokes-Korteweg System.”
- 15:30–16 : break
- 16–16:30 : Benjamin Braconnier : “Relaxation method n–based solvers for multifluid flows”
- 16:30–17:15: Wolfgang Dreyer : “Evolution of bubbles in a ternary liquid”

at 20 pm : dinner in a restaurant in Bordeaux

Friday 12

Chairman : G. Warnäcke/R. Abgrall

- 9:00– 9:45 :Christian Rohde :“One–dimensional wave patterns in phase transition problems”
- 9:45–10:15 : Dennis Kröninger :“Particle Tracking Velocimetry measurements on the flow field around a collapsing cavitation bubble”
- 10:15–10:45 : break
- : 10:45–11:15 Nicolas Seguin : “On a simple model of isothermal phase transition”
- 11:15–11:45 Rainer Dahms : “Modeling of Primary Spray Breakup using a Refined Level Set Grid Method”
- 12–14: closing and lunch