

Publication de l'équipe
Modélisation Numérique
Dynamique des Fluides
2010

- Didier Clamond and Denys Dutykh. Dispersive wave equation derivation from a relaxed variational formulation. In , volume of , pages 40–42, 2010. Applied problems of aerodynamics, heat and mass transfers, Dnipropetrovsk, Ukraine, November 4-6.
- Sollogoub,C., Montmitonnet,P., Demay, Y., Agassant,J.-F, and Deparis, P. Origin of the bubble defect in the extrusion coating process. *Polym. Eng. Sci.*, 51(2) :347–357, 2011.
- Laffargue,J., Demay, Y., and Agassant,J.-F. Investigation of polymer stretching instabilities : Application to film blowing. *Intern. Polym. Proc.*, 5 :356–371, 2010.
- L. Silva, G. Puaux, M. Vincent, and P. Laure. A monolithic finite element approach to compute permeability at microscopic scales in lcm processes. *Int. J. Material Forming*, 3 :619–622, 2010.
- T. Coupez, H. Dignonnet, E. Hachem, P. Laure, L. Silva, and R. Valette. Multidomain finite element computations : Application to multiphase problems. In M Souli and D J Benson, editors, *Arbitrary Lagrangian-Eulerian and Fluid-Structure Interaction. Numerical Simulation*, pages 221–289. Wiley, 2010.
- G. Boffetta, A. Mazzino, S. Musacchio, and L. Vozella. Rayleigh-taylor instability in a viscoelastic binary fluid. *Journal of Fluid Mechanics*, 643(-1) :127–136, 2010.
- G. Boffetta, F. De Lillo, and S. Musacchio. Nonlinear diffusion model for rayleigh-taylor mixing. *Phys. Rev. Lett.*, 104(3) :034505, Jan 2010.
- G. Boffetta, A. Mazzino, S. Musacchio, and L. Vozella. Statistics of mixing in three-dimensional rayleigh-taylor turbulence at low atwood number and prandtl number one. *Physics of Fluids*, 22(3) :035109, 2010.
- G. Boffetta, A. Mazzino, S. Musacchio, and L. Vozella. Polymer heat transport enhancement in thermal convection : The case of rayleigh-taylor turbulence. *Phys. Rev. Lett.*, 104(18) :184501, May 2010.
- A. Celani, S. Musacchio, and D. Vincenzi. Turbulence in more than two and less than three dimensions. *Phys. Rev. Lett.*, 104(18) :184506, May 2010.
- G. Boffetta and S. Musacchio. Evidence for the double cascade scenario in two-dimensional turbulence. *Phys. Rev. E*, 82(1) :016307, July 2010.
- B. Nkonga e. Cari 2010 : African conference on research in computer science and applied mathematic. du 18 au 21, Octobre 2010.
- M. Minguez, R. Pasquetti, and E. Serre. High-order les of the flow over a simplified car model : on the influence of the reynolds number. *Europ. J. of Comput. Mech.*, 18(7-8) :627–646, 2010.
- JL. Guermond and R. Pasquetti. Entropy viscosity method for high-order approximation of conservation laws. *Lecture Notes in computational Science and Engineering*, 76 :411–418, 2010. Paper presented by R. Pasquetti at the ICOSA-HOM 09 Congress, Trondheim, June 22-26, 2009.

- R. Pasquetti. Temporal / spatial simulation of the stratified far wake of a sphere. *Computers & Fluids*, 40 :179–187, 2010.
- R. Pasquetti and F. Rapetti. Spectral element methods on unstructured meshes : Which interpolation points? *Numerical Algorithms*, 55(2-3) :349–366, 2010.
- M. Minguez, C. Brun, R. Pasquetti, and E. Serre. Experimental and high order les analysis of the near wall flow over a square cylinder. In *CD-ROM Proc. of Conf. ETMM8, Marseille, June 9-11*. 2010. Orateur : M. Minguez.
- JL. Guermond, R. Pasquetti, and B. Popov. Entropy viscosity for conservation equations. In *CD-ROM Proc. of the ECCOMAS CFD 2010 Conf., Lisbon, June 14-17*. 2010. Orateur : R. Pasquetti.
- P. Tamain, N. Fedorczak, Ph. Ghendrih, J. Gunn, M. Koan, Y. Sarazin, H. Bufferand, G. Chiavassa, G. Ciraolo, L. Isoardi, A. Paredes, F. Schwander, E. Serre, H. Guillard, A. Bonnement, and R. Pasquetti. Towards a comprehensive approach of edge and sol transport issues : from experimental results to global simulations. In *23rd IAEA Fusion Energy Conference, Daejeon, Korea Rep., October 11-16*. 2010. Orateur : P. Tamain.
- L. Biancofiore, F. Gallaire, and R. Pasquetti. Influence of confinement on a two-dimensional wake. In *8th ERCOFTAC SIG 33 Workshop - Global Instabilities of Open Flows, Nice, France, June 30- July 2*. 2010. Orateur : L. Biancofiore.
- L. Biancofiore, F. Gallaire, and R. Pasquetti. Influence of the shear layer thickness on confined wakes. In *63rd Annual Meeting of the APS Division of Fluid Dynamics, Long Beach, CA, USA, November 21-23*. 2010. Orateur : L. Biancofiore.
- Coulet, P., J. M. Gilli, and Rousseaux, G. On the critical equilibrium of the spiral spring pendulum. *PROCEEDINGS OF THE ROYAL SOCIETY A-MATHEMATICAL PHYSICAL AND ENGINEERING SCIENCES*, 466(2114) :407–421, FEB 8 2010.
- Harunori Yoshikawa, Christian Mathis, Philippe Maïssa, Germain Rousseaux, and Stéphane Douady. Pattern formation of bubbles emerging periodically at a free surface. *EUROPEAN PHYSICAL JOURNAL E*, 33(1) :407–421, September 2010.
- Germain Rousseaux, Philippe Maïssa, Christian Mathis, Pierre Coulet, Thomas Philbin, and Ulf Leonhardt. Horizons effects with surface waves on moving water. *NEW JOURNAL OF PHYSICS*, 12 :095018, September 2010.
- Renaud Maes, Germain Rousseaux, Benoit Scheid, Manorajan Mishra, Pierre Colinet, and Anne de Wit. Experimental study of dispersion and miscible viscous fingering of initially circular samples in Hele-Shaw cells. *PHYSICS OF FLUIDS*, 22(12) :123104, December 2010.
- A. Celani, S. Rubenthaler and D. Vincenzi. Dispersion and collapse in stochastic velocity fields on a cylinder. *J. Stat. Phys.*, 138(4-5) :579–597, March 2010.

A. Celani, S. Musacchio and D. Vincenzi. Turbulence in more than two and less than three dimensions. *Phys. Rev. Lett.*, 104 :184506, May 2010.

D. Vincenzi. Dispersion and collapse in stochastic velocity fields on a cylinder. Analysis and Probability, Nice, France, November 2010.

D. Vincenzi. Dispersion and collapse in turbulent transport. Ecole d'été de Probabilités, Saint-Flour, France, July 2010.