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Chargé de Recherche CNRS
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Formation

Doctorat de Physique des Liquides de l'Université Paris VI : "Etude expérimentale et numérique des auto-oscillations d'un jet confiné" (1996)

Thèmes de recherche

Instabilité et transition à la turbulence
Transport de particules
Aérodynamique
Sillages et couplage fluide-structure

Enseignement

Chargé d'enseignement à l'Ecole Polytechnique – ParisTech (1997 – 2010)
Professeur à l'Ecole Nationale du Génie de l'Eau et de l'Environnement (1999 – 2009)
Professeur à l'Ecole des Ponts – ParisTech (2005-)

Autres activités

Membre du CNU section 60 (nommé 2011-2015, élu 2015-)
Expertises diverses, jury de thèses et revues (Journal of Fluid Mechanics, Physics of Fluids, International Journal of Multiphase Flow, Journal of Fluids and Structures...)

Quelques publications

M. Chrust, C. Dauteuille, T. Bobinski, J. Rokicki, S. Goujon-Durand, J.E. Wesfreid, G. Bouchet & J. Dušek, Effect of inclination on the transition scenario in the wake of fixed disks and flat cylinders, J. Fluid Mech., 770, pp. 189-209 (2015).

L. Bergougnoux, G. Bouchet, D. Lopez & E. Guazzelli, The motion of solid spherical particles falling in a cellular flow field at low Stokes number, Phys. Fluids, 26 (093302), 15 pages (2014).

T. Akbar, G. Bouchet & J. Dušek, Co-existence of A and B modes in the cylinder wake at $Re=170$, European Journal of Mechanics B/Fluids, 48, pp. 19-26 (2014).

M. Chrust, G. Bouchet & J. Dušek, Effect of solid body degrees of freedom on the path instabilities of freely falling or rising flat cylinders, Journal of Fluids and Structures, 47, pp. 55-70 (2014).

C. Loux, G. Bouchet, M. Bouquey & R. Muller, Sources of irreversibilities in a perfectly axisymmetric geometry at low Reynolds numbers, *Polymer Engineering and Science*, 54 (9), pp. 2046-2056 (2014).

M. Chrust, G. Bouchet & J. Dušek, Numerical simulation of the dynamics of freely falling discs, *Phys. Fluids*, 25 (044102), 24 pages (2013).

C. Le Bot & G. Bouchet, Thermal mixed convection past a sphere in an assisting flow, *International Journal of Thermal Sciences*, 65, pp. 170-177 (2013).

G. Bouchet & E. Climent, Unsteady behavior of a confined jet in a cavity at moderate Reynolds numbers, *Fluid Dyn. Res.* 44 (025505), 11 pages (2012).

T. Akbar, G. Bouchet & J. Dušek, Numerical investigation of the subcritical effects at the onset of three-dimensionality in the circular cylinder wake, *Phys. Fluids*, 23 (094103), 11 pages (2011).

M. Bouquey, C. Loux, R. Muller & G. Bouchet, Morphological study of two-phase polymer blends during compounding in a novel compounder based on elongational flow, *J. Appl. Polym. Sci.*, 119 (1), 482-490 (2011).

C. Loux, G. Bouchet & R. Muller, Sources of irreversibilities in a perfectly axisymmetric geometry at low Reynolds numbers, *Rhéologie*, 19, pp. 55-68 (2011).

M. Chrust, G. Bouchet & J. Dušek, Parametric study of the transition in the wake of oblate spheroids and flat cylinders, *J. Fluid Mech.*, 665, pp. 199-208 (2010).

M. Kotouč, G. Bouchet & J. Dušek, Drag and flow reversal in mixed convection past a heated sphere, *Phys. Fluids*, 21 (054104), 14 pages (2009).

M. Kotouč, G. Bouchet & J. Dušek, Transition to turbulence in the wake of a fixed sphere in mixed convection, *J. Fluid Mech.*, 625, pp. 205-248 (2009).

M. Kotouč, G. Bouchet & J. Dušek, Loss of axisymmetry in flow past a heated sphere - assisting flow, *Int. J. Heat Mass Transfer*, 51, pp. 2686-2700 (2008).

M. Kotouč, G. Bouchet & J. Dušek, Sillage d'une sphère chauffée - perte d'axisymétrie dans la configuration "assisting flow", *Récents Progrès en Génie des Procédés*, 94, (2007).

G. Bouchet, M. Mebarek & J. Dušek, Hydrodynamic forces acting on a rigid fixed sphere in early transitional regimes, *European Journal of Mechanics B/Fluids*, 25, pp. 321-336 (2006).

P. Comte, M. Haberkorn, G. Bouchet, V. Pagneux, Y. Auregan, Large-Eddy Simulation of acoustic propagation in a turbulent channel flow, *Direct and Large-Eddy Simulation VI Ercoftac Series*, 10, pp. 521-528 (2006).

M. Jenny, J. Dušek & G. Bouchet, Instabilities and transition of a sphere falling or ascending freely in a Newtonian fluid, *J. Fluid Mech.*, 508, pp. 201-239 (2004).

M. Jenny, G. Bouchet & J. Dušek, Nonvertical ascension or fall of a free sphere in a Newtonian fluid, *Phys. Fluids*, 15 (1), pp. 19-112 (2003).

G. Bouchet, E. Climent & A. Maurel, Instability of a confined jet impinging on a water/air free surface, *Europhys. Lett.*, 59 (6), pp. 827-833 (2002).

M. Jenny, G. Bouchet & J. Dušek, Influence of instabilities on the trajectory of a light sphere, *Trans. ASME-FEDSM* (2002).

A. Maurel & G. Bouchet, Simultaneous characterization of temperature and velocity profiles using Time Reversal : numerical study of free convection, *Europhys. Lett.*, 53 (5), pp. 584-590 (2001).