

Europass Curriculum Vitae

Personal information

Surname(s) / First name(s)

Address(es)

Email(s)

Nationality(-ies)

Date of birth

Biancofiore, Luca

Office: Department of Mechanical Engineering, Imperial College London, Exhibition Road, South Kensington, London, SW7 2AZ, United Kingdom

l.biancofiore@imperial.ac.uk

Italy / USA

01 April 1981

Professional experience

10/2013

Research Fellow at Imperial College London, United Kingdom, Marie Curie Fellowship, supervisor T. Zaki

09/2012-08/2013

Research Associate at Royal Institute of Technology (KTH), Stockholm, Sweden (Göran Gustafsson Fellowship), supervisor L. Brandt

01/2012-08/12

Research Associate at Imperial College London, United Kingdom, supervisor T. Zaki.

09/2011-12/2011

Postdoctoral researcher at University of Nice - Sophia Antipolis, France

Education

2007 - 2011

PhD Thesis in Fluid Mechanics

Supervisors

François Gallaire and Richard Pasquetti

Subject

Influence of confinement on the spatio-temporal development of wake flows

University of Nice - Sophia Antipolis - France

2004 - 2006

Master degree in Chemical Engineering

University of L'Aquila - Italy

Final note

110/110 cum laude

2000 - 2004

Undergraduate studies in Chemical Engineering

University of L'Aquila - Italy

Final note

110/110 cum laude

Research traineeships

2013

One month as visiting researcher at EPFL/LFMI - Lausanne - Switzerland

2011

Summer school Micro and Complex flow 2011, Royal Institute of Technology (KTH), Stockholm.

2010

Three months for PhD traineeship to EPFL/LFMI - Lausanne - Switzerland under the direction of François Gallaire.

2007

Summer school LMS EPSRC Short Course, Hydrodynamic Stability Theory, Keele University.

2005 - 2006

Nine months Master traineeship at Chemical Engineering Laboratory of University of L'Aquila.

Supervisor

Lorenzo Giovanni Gibilaro

Subject

Experimental measure of the dynamic and the kinematic wave in fluidized beds.

2004

Three months License traineeship under the direction of Lorenzo Giovanni Gibilaro at Chemical Engineering Laboratory of University of L'Aquila.

Invited seminars

November 2013

November 2013

July 2013

May 2013

October 2012

Languages

Teaching Activities

2008 - 2011

Training on Analysis, Statistics and Algebra for Physics, Chemistry, Computer Sciences and Economy students.

Publications

- 1 L. Biancofiore, L. Brandt & T. A. Zaki, **Stability of polymer synthetic wakes**, *J. Fluid Mech.*, (preprint), 2014.
- 2 L. Biancofiore, F. Gallaire & E. Heifetz, **Interaction between counterpropagating Rossby waves and capillary waves in planar jets and wakes**, *Phys. Fluids*, (preprint), 2014.
- 3 L. Biancofiore, F. Gallaire, P. Laure & E. Hachem, **Direct numerical simulations of two-phase immiscible wakes**, *Fluid Dyn. Res.*, (accepted), February 2014.
- 4 L. Biancofiore, **Crossover between two- and three-dimensional turbulence in spatial mixing layers**, *J. Fluid Mech.*, **745**, 164-179, 2014.
- 5 L. Biancofiore & F. Gallaire, **Counterpropagating Rossby waves in confined plane wakes**. *Phys. Fluids* , **24**, 074102, 2012.
- 6 L. Biancofiore, F. Gallaire & R. Pasquetti, **Influence of confinement on obstacle-free turbulent wakes**. *Comp. & Fluids*, **58**, 27-44, 2012.
- 7 L. Biancofiore, F. Gallaire & R. Pasquetti, **Influence of confinement on a two-dimensional wake**. *J. Fluid Mech.*, **688**, 297-320, 2011.
- 8 L. Biancofiore, F. Gallaire & R. Pasquetti, **Large eddy simulations of confined turbulent wake flows**, *J. Phys. Conf. Ser.*, **318**, 042044, 2011.
- 9 L. Biancofiore & F. Gallaire, **The influence of shear layer thickness on the stability of confined two-dimensional wakes**. *Phys. Fluids* **23**, 034103, 2011
- 10 L. Biancofiore & F. Gallaire, **The influence of confinement on temporal stability of plane jets and wakes**, *Phys. Fluids* **22**, 014106, 2010.

Conferences

- 1 L. Biancofiore, F. Gallaire, P. Laure & E. Hachem, **Direct numerical simulations of two-phase immiscible wakes**, 5th International Symposium, Bifurcations and Instabilities in Fluid Dynamics, 8-11 July, 2013, Haifa, Israel.
- 2 L. Biancofiore, F. Gallaire & P. Laure, **Interaction between counterpropagating Rossby and capillary waves in planar jets and wakes**, 65th Annual Meeting of APS Division of Fluid Dynamics, 18-20 November, 2012, San Diego, CA, USA.
- 3 L. Biancofiore & S. Musacchio, **Growth in 2D and 3D turbulent mixing layers**, 9th Euromech Fluid Mechanics Conference 2012, Rome, Italy.
- 4 L. Biancofiore, F. Gallaire & R. Pasquetti, **Large eddy-simulations of confined turbulent wake flows**, 13th European Turbulence Conference, 12 - 15 September 2011, Warsaw, Poland.
- 5 L. Biancofiore, F. Gallaire & R. Pasquetti, **The influence of shear layer thickness in the stability of confined 2D wakes**, 63rd Annual Meeting of APS Division of Fluid Dynamics, 21-23 November, 2010, Long Beach, CA, USA.

- 6 L. Biancofiore, F. Gallaire & R. Pasquetti, **Stability of confined two-dimensional wakes by means of DNS**, 8th Euromech Fluid Mechanics Conference 2010, Bad Reichenhall, Germany.
- 7 L. Biancofiore, F. Gallaire & R. Pasquetti, **Influence du confinement sur un sillage bidimensionnel**, XIX Congrès Français de Mécanique 2009, Marseille.

Honours and awards

- 2012 Marie Curie IntraEuropean Fellowship 2012 Fellowship
2012 Göran Gustafsson Postdoctoral Fellowship in Science

Computational skills

Fortran, C++, Matlab, OpenMPI, Unix, Gnuplot, TecPlot, Visit, Paraview

Scientific interests

Jets/wakes stability, non-Newtonian fluids, local stability analysis, direct numerical simulation (DNS), large eddy simulation (LES), turbulence, multi-phase flows, capillarity.