

Curriculum vitae for LUCA BRANDT

Research areas: Fluid dynamics. Multiphase and particle-laden flows. Hydrodynamics stability and flow control. Numerical simulations. Bio and complex fluids.

Academic Career

2024- 2012-2024	Professor in Hydraulics, Politecnico di Torino, Italy Professor in Fluid Mechanics, Royal Institute of Technology, (KTH), Stockholm, Sweden
2009-2012	Associate Professor in Fluid Mechanics, KTH Mechanics, Stockholm
2008-2014	Senior researcher of Swedish Research Council, KTH Mechanics
2004-2008	Research Associate at KTH Mechanics
2005	“Chargé de Recherche” CNRS, Ecole Polytechnique, France (3 months)

Education

2008	Docent in Fluid Mechanics, KTH Mechanics, Stockholm
2003	PhD in Fluid Mechanics, KTH Mechanics, Stockholm. Numerical studies of bypass transition in the Blasius boundary layer. Supervisor: Prof. D. S. Henningson
1997	Master degree in Mechanical Engineering, University of Rome “La Sapienza”, Italy. Grade: 110/110 with honors

Positions held

2018-2024	International Chair, Department of Energy and Process Engineering Faculty of Engineering, NTNU, Norway
2017- 2016-17	Adjunct Professor, University of Bologna, Italy Chairman of the review Panel in Mechanical Engineering of Swedish Research Council
2016- 2015- 2015- 2015- 2014-2019 2013-2018	Editorial Board Member for Open Access Journal: <i>ChemEngineering</i> Associate Editor for <i>European Journal of Mechanics - B/Fluids</i> Associate Editor for <i>MECCANICA</i> Advisory board for Ercoftac journal <i>Flow, Turbulence and Combustion</i> Management group of the EU Cost Action: Flowing Matter Member of the European Fluid Mechanics Conference Committee (EFMCC), managed by Euromech
2013-14 2013-	Deputy head of Department of Mechanics, KTH Member of the Editorial Board of <i>Theoretical and Applied Mechanics Letters</i>
2012-2014 2008-2017 2006-	Director of studies for Fluid Mechanics courses at KTH Director of studies Linné FLOW Centre graduate school Member of Management Group of Linné FLOW Centre at KTH

Prizes and awards

2014	Outstanding young Researcher , from Swedish Research Council (VR): 9 in all areas of natural and engineering sciences
2013	ERC Consolidator Grant TRITOS , from April 2014
2008	Awarded the Senior Researcher Position (Rådsforskartjänt) from the Swedish Research Council (VR) in Mechanics.
2006	Awarded the Göran Gustafsson Fellowship for young researchers

Publications

>210 Journal papers (1 *Annual Review Fluid Mechanics*, 12 in *Physical Review Letters*, 73 in *Journal of Fluid Mechanics*, 21 in *Physics of Fluids*, 21 *Physical Review E* and *F*, 6 invited papers after conference presentations)

Bibliometry (July 15, 2024):

<u>Google scholar</u>	Citations:	11981	6914	(since 2019)
	h-index	63	46	(since 2019)
	i10-index	172	159	(since 2019)

Supervision– POSTDOCTORAL STUDENTS (15)

Jan 2011 - Dec 2012	Ruth Lambert.
2011 - 2013	Gaetano Sardina, Francesco Picano.
Sept 2012 - Sept 2013	Luca Biancofiore (Göran Gustafsson fellow).
Aug 2013 - Mar 2015	Cecilia Rorai (Göran Gustafsson fellow).
Apr 2014- July 2015	Arghya Samanta (Wenenr GRen fellow)
2015- 2016	Ekaterina Ezhova, Jean-Christophe Loiseau
2017-2019	Francesco De Vita, Pedro Costa
Nov 2016- Aug 2019	Marco Rosti
Jan 2020-Dec 2022	M. Crialesi Esposito, Andreas Demous
Dec 2022	Vishal Agrawal and Akshay Bathnagar

Supervision – DOCTORAL STUDENTS WHO GRADUATED (14+1)

Lars-Uwe Schrader (2010) Joy Klinkenberg (2013, double Degree with TU/Eindhoven)
Lailai Zhu (2014) Iman Lashgari (2015) Walter Fornari (2017)
Mehdi Niazi, Arash Alizad, Hamid Tabaei, Dhiya Alghalibi, Sagar Zade (2019)
Anthony Ge (2020), Ali Yousefi (2022), Armin Shahmardi, Nicolo Scapin (2023)
June 2014 Caj-Juan Zhan, Licentiate degree (Scholarship from Chinese Science Council)

Supervision – DOCTORAL STUDENTS AT PRESENT BEING SUPERVISED (5)

N. Mastroianni, A, Grujic. N. Agrawal, S. Mirzareza and S. Samani Salimi (NTNU)

Co-advisor of 5 PhD students

Advisor for the Diploma Thesis works at KTH Mechanics of more than 20 students.
Supervisor for best performed diploma work Award 2010, Bo Rydin's Foundation, Göteborg.

Main Research Grants

2019	PI of MicroPlasticX Integrated approach on the fate of MicroPlastics (MPs) towards healthy marine ecosystems, JPI Oceans
2017	PI of application for Research Environment from Swedish Research Council, <i>Hybrid multiscale modelling of transport phenomena for energy efficient processes</i> , 2500K€ for 6 years (18 out 222 funded)
2015	FET-OPEN EU Project, MicrofluSA, 700.000€ to KTH
2014	VR Outstanding young Researcher , about 2000K€ for 6 years
2013	ERC Consolidator Grant, TRITOS , 2000K€
2009	Special Researcher Position (Rådsforskartjänt) from the Swedish Research Council . 120 K€ per 6 years. First ever position in Mechanics announced in Sweden.

Other activities and merits

12 times Invited speaker at international workshops and conferences. 3 invited lectures at summer schools. Among those : TSFP11, Southampton, UK ; ETC17, Turin, Italy.

Referee for major international journals: *Physical Review Letters, Journal of Fluid Mechanics, Physics of Fluids, Physical Review E, European Journal of Mechanics/B Fluids, Europhysics Letters, Experiments in Fluids, International Journal of Heat and Fluid Flow*.

Evaluation of application for research funding from *Foundation for Fundamental Research on Matter (FOM)*, the Netherlands, the *Swiss National Science Foundation*.

Member of panel for projects in Mathematics, Physical Science and Technology (FRINATEK), of the Research Council of Norway and of panel for internation post-docs of *Swedish Research Council*