

## Curriculum vitae for LUCA BRANDT

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

### Academic Career

<b>2012-</b>	<b>Professor in Fluid Mechanics,</b> 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	<b>Docent</b> in Fluid Mechanics, KTH Mechanics, Stockholm
<b>2003</b>	<b>PhD</b> 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-	International Chair, Department of Energy and Process Engineering Faculty of Engineering, NTNU, Norway
2017-	Adjunct Professor, University of Bologna, Italy
2016-17	Chairman of the review Panel in Mechanical Engineering of Swedish Research Council
2016-	Editorial Board Member for Open Access Journal: <i>ChemEngineering</i>
2015-	Associate Editor for <i>European Journal of Mechanics - B/Fluids</i>
2015-	Associate Editor for <i>MECCANICA</i>
2015-	Advisory board for Ercoftac journal <i>Flow, Turbulence and Combustion</i>
2014-	Management group of the EU Cost Action: Flowing Matter
2013-2018	Member of the European Fluid Mechanics Conference Committee (EFMCC), managed by Euromech
2013-14	Deputy head of Department of Mechanics, KTH
2013-	Member of the Editorial Board of <i>Theoretical and Applied Mechanics Letters</i>
2012-2014	Director of studies for Fluid Mechanics courses at KTH
2008-2017	Director of studies Linné FLOW Centre graduate school
2006-	Member of Management Group of Linné FLOW Centre at KTH

### Prizes and awards

2014	<b>Outstanding young Researcher</b> , from Swedish Research Council (VR): 9 in all areas of natural and engineering sciences
2013	<b>ERC Consolidator Grant</b> TRITOS, from April 2014
2008	Awarded the <b>Senior Researcher Position</b> (Rådsforskartjänst) from the Swedish Research Council (VR) in Mechanics. It was the first time a position in Applied Mechanics was announced in Sweden. This implies full financial support for six year.
2006	Awarded the Göran Gustafsson Fellowship for young researchers

### Publications

**106** Journal papers (**7** in *Physical Review Letters*, **41** in *Journal of Fluid Mechanics*, **19** in *Physics of Fluids*, 1 *Journal Royal Society Interface*, 5 *Physical Review E*, 6 invited papers after conference presentations) **2** Review papers in 2014

### Bibliometry:

<u>Google scholar</u>	Citations:	4202	2865 (since 2013)
	h-index	36	31 (since 2012)
	i10-index	75	72 (since 2012)

### **Supervision– POSTDOCTORAL STUDENTS (8)**

Jan 2011 - Dec 2012	Ruth Lambert.
Feb 2011 - Sept 2013	Gaetano Sardina.
Sept 2011 - Sept 2013	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)
Jan 2015- Dec 2016	Ekaterina Ezhova
Mar 2015-Oct 2016	Jean-Christophe Loiseau
Nov 2016-	Marco Rosti
Feb 2017-	Francesco De Vita

### **Supervision – DOCTORAL STUDENTS WHO GRADUATED (5+1)**

Nov 2010	Lars-Uwe Schrader.
Dec 2013	Joy Klinkenberg (double Degree with TU/Eindhoven).
Mar 2014	Lailai Zhu.
Dec 2015	Iman Lashgari
Dec 2017	Walter Fornari
June 2014	Caj-Juan Zhan, Licentiate degree (Scholarship from Chinese Science Council)

### **Supervision – DOCTORAL STUDENTS AT PRESENT BEING SUPERVISED (10)**

Mehdi Niazi, Arash Alizad, Sagar Zade, Hamid Tabaei, Dhiya Alghaliby, Anthony Ge, Erik Stenberg, Ali Yousefi, Nicolo Scapin, Armin Sharmadi

### **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**

2017	PI of application for <b>Research Environment</b> 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	<b>VR Outstanding young Researcher</b> , about 2000K€ for 6 years
2013	<b>ERC Consolidator Grant, TRITOS</b> , 2000K€
2009	<b>Special Researcher Position (Rådsforskartjänt) from the Swedish Research Council</b> . 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.

**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 international post-docs of *Swedish Research Council* (VR)

Member of the Local Organising Committee of the European Turbulence Conference, ETC13, held at KTH in 2017.

Member of the Local Organising Committee of the Seventh IUTAM Symposium on Laminar-Turbulent Transition held at KTH in 2009.