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## Personal information

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 Born on May 29th, 1984, in Verbania, Italy

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## Academic appointments

**03/2020-today**

Associate Professor of Mathematical Physics  
 Politecnico di Torino, Department of Mathematical Sciences "G. L. Lagrange"

**10/2015-02/2020**

Research Fellow in Applied Mathematics  
 University of St Andrews, School of Mathematics and Statistics

**11/2014-09/2015**

Postdoctoral Fellow in Mathematics for the Life Sciences  
 École Normale Supérieure Paris-Saclay, Centre de Mathématiques et de Leurs Applications

**11/2013-10/2014**

Postdoctoral Fellow in Mathematics  
 Sorbonne Université, Laboratoire Jacques-Louis Lions

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## Education and qualifications

**2022**

Italian National Scientific Qualification as Full Professor of Mathematical Physics  
 (Abilitazione scientifica nazionale alla funzione di professore universitario di prima fascia per il settore concorsuale 01/A4 - Fisica Matematica)

**2018**

Italian National Scientific Qualification as Associate Professor of Mathematical Physics  
 (Abilitazione scientifica nazionale alla funzione di professore universitario di seconda fascia per il settore concorsuale 01/A4 - Fisica Matematica)

**2013**

PhD in Applied Mathematics  
 Politecnico di Torino

**2008**

MSc in Engineering Physics  
 Politecnico di Torino  
 Final grade: 110/110 cum laude  
 Average grade: 30/30

**2006**

BSc in Engineering Physics  
 Politecnico di Torino  
 Final grade: 110/110 cum laude  
 Average grade: 28/30

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## Fellowships, prizes and visiting professorships

- 2022** 1-month Visiting Professorship awarded by the Sorbonne Université
- 2015** 5-year Research Fellowship in Applied Mathematics from the University of St Andrews
- 2015** INdAM-SIMAI-UMI 2014 prize for the best Italian PhD thesis in Applied Mathematics
- 2014** 2-year Postdoctoral Fellowship in Mathematics for the Life Sciences from the Fondation Mathématique Jacques Hadamard - Labex Mathématique Hadamard
- 2013** 1-year Postdoctoral Fellowship in Mathematics from the Fondation Sciences Mathématiques de Paris
- 2009** Doctoral grant from the MIUR-FIRB Project RBID08PP3J – ‘Mathematical methods and tools for the modelling and simulation of the onset of cancer’

**Editorial and society board roles**


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<b>2022-today</b>	Member of the Board of the European Society for Mathematical and Theoretical Biology (ESMTB)
<b>2022-today</b>	Member of the Editorial Board of Physica D: Nonlinear Phenomena

**Grants**


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<b>2022-2026</b>	Centre National de la Recherche Scientifique - International Research Project (40,000€)
<b>2019</b>	Quarterly Journal of Mechanics and Applied Mathematics - Fund for Applied Mathematics (£1,000)
<b>2017</b>	Edinburgh Mathematical Society - Research Support Fund (£600)
<b>2017</b>	London Mathematical Society - Research Grant Scheme 1 (£4,000)
<b>2017</b>	Glasgow Mathematical Journal Trust - Learning and Research Support Fund (£2,950)
<b>2017</b>	Edinburgh Mathematical Society - Research Support Fund (£750)
<b>2017-2019</b>	Centre National de la Recherche Scientifique - Projet International de Coopération Scientifique (10,500€)
<b>2016-2020</b>	ITMO Cancer - Tumor Heterogeneity and Ecosystem program (1,268,384€) Role: Co-lead coordinator of the task ' <i>In vitro</i> modelling of glioblastoma response to treatment' within the project 'Modeling of glioblastoma treatment-induced resistance and heterogeneity by multi-modal imaging'

**Invited short-term ( $\leq 1$ month) research stays (selected)**


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<b>2022</b>	School of Mathematics and Computer Science, Swansea University
<b>2022</b>	Institut Henri Poincaré, Sorbonne Université
<b>2019</b>	Mathematical Oncology Laboratory, Universidad de Castilla-La Mancha
<b>2019</b>	Wolfson Centre for Mathematical Biology, University of Oxford
<b>2018-2019</b>	Fachbereich Mathematik und Statistik, Universität Konstanz
<b>2017-2018</b>	Facoltà di Scienze, Università degli Studi di Trento
<b>2016-2018</b>	Institut für Angewandte Mathematik, Universität Heidelberg
<b>2015-2020</b>	Laboratoire Jacques-Louis Lions, Sorbonne Université

**Invited academic presentations (selected)****Conference and workshop talks**


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<b>12/2022</b>	From Kinetic Theory to Data Science and Related Topics (Università degli Studi di Pavia, Italy)
<b>09/2022</b>	Mathematical Models for Biological Multi-Scale Systems (Weierstrass Institute for Applied Analysis and Stochastics, Germany)
<b>07/2022</b>	Interacting Particle Systems in Mathematical Biology (Hausdorff Research Institute for Mathematics, Germany)
<b>06/2022</b>	SWAMBA Workshop on Mathematical Oncology (Swansea University, United Kingdom - virtual)
<b>05/2021</b>	Mathematical Biology on the Mediterranean Coast 2021 (Sorbonne Université, France - virtual)
<b>01/2020</b>	Mathematical Biology: Modeling, Analysis and Simulation (Institute for Mathematical Sciences, Singapore)

- 10/2019** 19th BIOMAT International Symposium (University of Szeged, Hungary)
- 08/2019** Mathematical Models in Cancer (Wolfgang Pauli Institute, Austria)
- 11/2018** Mathematical Modeling of Growth and Tissue Repair (Fondation des Treilles, France)
- 09/2018** Differential Equations Arising from Organising Principles in Biology (Mathematisches Forschungsinstitut Oberwolfach, Germany)
- 07/2018** Mathematical Perspectives in the Biology and Therapeutics of Cancer (Centre International de Rencontres Mathématiques, France)
- 07/2018** Asymptotic Approach to Spatial and Dynamical Organizations (Sorbonne Université, France)
- 07/2017** Mathematical Modeling of Therapeutic Resistance (Sorbonne Université, France)
- 06/2017** Modeling and Computational Approaches to Biology and Medicine (Istituto Nazionale di Alta Matematica “F. Severi”, Italy)
- 07/2016** Models in Cancer Therapy (Wolfgang Pauli Institute, Austria)
- 02/2015** Partial Differential Equations in Cancer Modelling (Banff International Research Station, Canada)
- 04/2014** Structured Integro-differential Models in Mathematical Biology (Wolfgang Pauli Institute, Austria)
- 05/2014** Outreach conference ‘Mathématiques en mouvement 2014’ (Université Paris 1 Panthéon-Sorbonne, France)

#### Minisymposium talks

- 07/2021** Mathematical models in ecology and epidemiology (SIMAI2020+21, Italy)
- 07/2019** Numerical approaches addressing multiscale computational challenges in cell population dynamics (ICIAM2019, Spain)
- 07/2019** Mathematical models in the systems biology of cancer (ICIAM2019, Spain)
- 07/2018** The interplay between short- and long-range interactions in biology (ECMTB2018, Portugal)
- 07/2017** Multiscale mathematical approaches for cancer development (SMB2017, Utah)
- 07/2016** Numerical methods for surface PDE problems in biology (ECMTB2016, United Kingdom)
- 06/2016** Nonlocal models in mathematical biology (CAIMS2016, Canada)
- 07/2014** Deterministic and stochastic models in biology and medicine (10th AIMS, Spain)

#### Departmental seminars

- 02/2022** Mathematics for Real World Systems Seminar (University of Warwick, United Kingdom - virtual)
- 04/2021** Applied Analysis Seminar (University of Graz, Austria - virtual)
- 02/2021** Cancer Modelling Seminar (University of Maryland, Maryland - virtual)
- 05/2019** SIAM Student Chapter Symposium (Bayes Centre, United Kingdom)
- 04/2019** Applied Mathematics Seminar (University of Glasgow, United Kingdom)
- 06/2018** BioMaths Colloquium (Swansea University, United Kingdom)
- 05/2018** Seminar of the Department of Excellence Project (Politecnico di Torino, Italy)
- 01/2018** Applied & Numerical Analysis and Mathematical Biology Seminar (Heriot-Watt University, United Kingdom)
- 09/2017** Seminar of the Heidelberg Graduate School of Mathematical and Computational Methods for the Sciences (Universität Heidelberg, Germany)

- 06/2017** Seminaire du Laboratoire Jacques-Louis Lions (Sorbonne Université, France)
- 03/2017** Invited lecture at Vanderbilt Integrative Cancer Biology Center (Vanderbilt University, Tennessee)
- 06/2017** Seminar of the Mathematics and Statistics Group (University of Stirling, United Kingdom)
- 01/2017** Mathematical Biology Seminar (Université Paul Sabatier, France)
- 06/2016** Seminar of the Biomathematics Group (INRIA Lyon, France)

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#### **Organisation of scientific meetings (selected)**

- 2022** Co-lead organiser of the workshop ‘W Math – Women and Mathematics’ at the Politecnico di Torino (>60 attendants)
- 2022** Co-lead organiser of the conference ‘BioTOMath – Mathematical Challenges in Biology and Medicine’ at the Politecnico di Torino (>60 attendants)
- 2022** Co-lead organiser of the workshop ‘Tissue Growth and Movement’ at the Institut Henri Poincaré (>60 attendants)
- 2021-today** Member of the organising committee of the programme ‘Multiscale Analysis and Methods for Quantum and Kinetic Problems’ at the Institute for Mathematical Sciences of the National University of Singapore
- 2018** Co-lead organiser of the 60th British Applied Mathematics Colloquium at the University of St Andrews (>300 attendants)
- 2017** Co-lead organiser of the 5th Scottish PDE Colloquium at the University of St Andrews (>40 attendants)

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#### **Peer-review activities**

##### **Journals and books**

Acta Applicandae Mathematicae, Annali di Matematica Pura ed Applicata, Applied Mathematical Modelling, Applied Mathematics Letters, Biology Direct, Bulletin of Mathematical Biology, Cancer Research, Computer and Mathematics with Applications, Communications in Mathematical Sciences, Kinetic and Related Models, Journal of Mathematical Biology, Journal of Nonlinear Science, Journal of Theoretical Biology, Mathematical Biosciences, Mathematical Biosciences and Engineering, Mathematics and Computers in Simulation, ESAIM: Mathematical Modelling and Numerical Analysis, Mathematical Modelling of Natural Phenomena, Nature Communications, Nonlinear Analysis, Nonlinearity, Open Biology, Physica A, Physica D, Physics Letters A, PLOS Computational Biology, PLOS ONE, Science Advances, Proceedings of the Royal Society A, Scientific Reports, SIAM Journal on Mathematical Analysis, SIAM Journal on Applied Mathematics, Springer Nature Books, Zeitschrift für Angewandte Mathematik und Physik (ZAMP)

##### **Research agencies and institutions**

Agence Nationale de la Recherche (France), National Science Centre (Poland), Institut National de Recherche en Informatique et en Automatique (France), Università degli Studi di Parma (Italy)

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#### **Supervision of students and postdocs**

- 2015-today** 32 BSc students, 11 MSc students, 7 PhD students, 3 postdocs

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#### **Institutional responsibilities (selected)**

- 2022** Secretary of postdoc hiring committee (Department of Mathematical Sciences, Politecnico di Torino)
- 2021** Secretary of postdoc hiring committee (Department of Mathematical Sciences, Politecnico di Torino)

- 2021** Secretary of RTDa researcher hiring committee (Department of Mathematics, Politecnico di Milano)
- 2020-2021** Secretary of the PhD in Pure and Applied Mathematics selection committee (Politecnico di Torino)
- 2019** Member of interdisciplinary PhD selection committee and interview panel (School of Medicine, University of St Andrews)
- 2018-2020** Organiser of the weekly seminar series ‘Applied Mathematics Seminars’ (School of Mathematics and Statistics, University of St Andrews)
- 2018-2020** Member of outreach committee (School of Mathematics and Statistics, University of St Andrews)
- 2018** Member of interdisciplinary PhD selection committee and interview panel (School of Medicine, University of St Andrews)
- 2017** Member of library committee (School of Mathematics and Statistics, University of St Andrews)

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**PhD examination committees**

- 2022** Member of PhD examination committee (Laboratoire Jacques-Louis Lions, Sorbonne Université)
- 2022** Chair of PhD examination committee (Department of Mathematical Sciences, Politecnico di Torino)
- 2017** Member of PhD examination committee (Laboratoire Jacques-Louis Lions, Sorbonne Université and Dipartimento di Ingegneria Meccanica, Energetica, Gestionale e dei Trasporti, Università degli Studi di Genova)

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**Teaching activity as course coordinator (CC) and lecturer (L)**

**PhD courses**

- 2022-2023** ‘Partial Differential Equations in Biology’, Politecnico di Torino (CC & L)  
‘Mathematical Models for Cell Movement and Tissue Growth’, Politecnico di Torino (CC & L)
- 2018-2019** ‘Differential and Integrodifferential Equations for Evolutionary Dynamics’, Università degli Studi di Trento (CC & L)

**BSc and MSc courses**

- 2022-2023** ‘Mathematical Methods for Engineers’, Politecnico di Torino (CC & L)  
‘Probability and Statistics’, Politecnico di Torino (CC & L)  
‘Equations of Mathematical Physics’, Politecnico di Torino (L)
- 2021-2022** ‘Mathematical Methods for Engineers’, Politecnico di Torino (L)  
‘Probability and Statistics’, Politecnico di Torino (CC & L)  
‘Equations of Mathematical Physics’, Politecnico di Torino (L)  
‘Linear Algebra and Geometry’, Politecnico di Torino (L)
- 2020-2021** ‘Rational Mechanics’, Politecnico di Torino (CC & L)  
‘Equations of Mathematical Physics’, Politecnico di Torino (L)  
‘Linear Algebra and Geometry’, Politecnico di Torino (L)

- 2019-2020** ‘Mathematical Biology I’, University of St Andrews (L)  
‘PDE Models of Spatial and Evolutionary Dynamics in Biological Systems’  
(intensive course), Università degli Studi di Verona (L)  
‘Mathematical Biology II’, University of St Andrews (CC & L)
- 2018-2019** ‘Mathematical Models of Cancer’ (intensive course), Università degli Studi di  
Verona (L)  
‘Mathematical Biology II’, University of St Andrews (CC & L)
- 2017-2018** ‘Mathematical Biology II’, University of St Andrews (CC & L)