

Mikaela Iacobelli

Curriculum Vitae

ETH Zürich
Department of Mathematics
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Personal information

Citizenship Italian citizen, permanent resident of the Swiss Federation (C permit).
Languages Italian (mother tongue), English (fluent), French (fluent), German (beginner).

Academic appointments

Apr 2023-present **Associate Professor** at the Department of Mathematics at *ETH Zürich*, Switzerland.
Apr 2019-Mar 2023 **Titular Professor** at the Department of Mathematics at *ETH Zürich*, Switzerland.
Dec 2020-Aug 2021 Sick leave and maternity leave.
Oct 2017-Mar 2019 **Assistant Professor** (with tenure) at the Department of Mathematics at *Durham University*, UK.
Oct 2015-Sep 2017 **Research Associate** at the Department of Pure Mathematics and Mathematical Statistics at the *University of Cambridge*, UK.
Mentor: Prof. Clément Mouhot.

Education

Dec 2015 **Phd degree** at the *University of Rome Sapienza* and at *École Polytechnique* in Paris.
Title of the thesis: *Dynamics of large particle systems*.
Advisors: Prof. Emanuele Caglioti and Prof. François Golse.
Jury: Prof. Clément Mouhot, Prof. Thierry Paul, Prof. Mario Pulvirenti, Prof. Giuseppe Savaré.
Grade: Ottimo (Italian) and Très Honorable (French).
Jul 2012 **Master degree cum laude** at the *University of Rome Sapienza*, Italy.
Title of the thesis: *Equazione di Vlasov-Poisson e smorzamento di Landau (Vlasov-Poisson equation and Landau damping)*. Advisor: Prof. Emanuele Caglioti.
Dec 2009 **Bachelor degree cum laude** at the *University of Rome Sapienza*, Italy.
Title of the thesis: *Gruppi di riflessione (Reflection groups)*. Advisor: Prof. Alessandro D'Andrea.

Honours & awards

2022 Colloquium at the *SwissMAP General Meeting*, Les Diablerets, Switzerland.
2021 Invited speaker at the *International Congress of Mathematical Physics (ICMP)*, in the scientific session on Partial Differential Equations.
2021-2023 Co-PI of the *Germaine de Staël Funding Program* for French-Swiss cooperation (together with Prof. Francesco Salvarani).
2019 Research member of the *Trimester Program in Kinetic Theory* at the *Hausdorff Research Institute of Mathematics* in Bonn, Germany.
2015 *L'Oréal prize for Women in Science*, French edition for Phd students and postdoctoral researchers.
2015 PI of the *Starting Research Grant* of the *University of Rome Sapienza*, Italy.

Research interests

My research is focused on the study of problems arising from the broad context of statistical mechanics. In particular, I am interested in the analysis of partial differential equations in kinetic theory, and in the study of singular limits relating particle models to continuous dynamics. My work involves tools from partial differential equations, calculus of variations, probability, and Riemannian geometry.

Publications and preprints

Publications

20. **Stability estimates for the Vlasov-Poisson system in p -kinetic Wasserstein distances** in collaboration with Jonathan Junné.
to appear on *Bull. Lond. Math. Soc.*
19. **On the local uniqueness of steady states for the Vlasov-Poisson system.**
J. Funct. Anal. 286 (2024), no. 7.
18. **Landau damping on the torus for the Vlasov-Poisson system with massless electrons** in collaboration with Antoine Gagnebin.
J. Differential Equations 376 (2023), 154–203.
17. **Global well-posedness of Vlasov-Poisson-type systems in bounded domains**, in collaboration with Ludovic Cesbron.
Anal. PDE 16 (2023), no. 10, 2465–2494.
16. **A new perspective on Wasserstein distances for kinetic problems**
Arch. Ration. Mech. Anal. 244 (2022), no. 1, 27–50.
15. **Recent developments on quasineutral limits for Vlasov-type equations**, in collaboration with Megan Griffin-Pickering.
Recent advances in kinetic equations and applications, Springer INdAM Series, no. 48, (2022).
14. **From Newton’s second law to Euler’s equations of perfect fluids**, in collaboration with Daniel Han-Kwan.
Proc. Amer. Math. Soc. 149 (2021), no. 7, 3045–3061.
13. **Global strong solutions in R^3 for ionic Vlasov-Poisson systems**, in collaboration with Megan Griffin-Pickering.
Kinet. Relat. Models 14 (2021), no. 4, 571–597.
12. **Global well-posedness for the Vlasov-Poisson system with massless electrons in the 3-dimensional torus**, in collaboration with Megan Griffin-Pickering.
Comm. Partial Differential Equations 46 (2021), no. 10, 1892–1939.
11. **Recent developments on the well-posedness theory for Vlasov-type equations**, in collaboration with Megan Griffin-Pickering.
From particle systems to partial differential equations, 301–319, Springer Proc. Math. Stat., 352, (2021).
10. **Singular Limits for Plasmas with Thermalised Electrons**, in collaboration with Megan Griffin-Pickering
J. Math. Pures Appl. (9) 135 (2020), 199–255.
9. **Weighted ultrafast diffusion equations: from well-posedness to long-time behaviour**, in collaboration with Francesco S. Patacchini and Filippo Santambrogio
Arch. Ration. Mech. Anal. 232 (2019), no. 3, 1165–1206.
8. **Asymptotic analysis for a very fast diffusion equation arising from the 1D quantization problem.**
Discrete Contin. Dyn. Syst. 39 (2019), no. 9, 4929–4943.

7. **A gradient flow perspective on the quantization problem.**
PDE Models for Multi-Agent Phenomena, Springer INdAM Ser. (2018), 28, Springer, Cham, 145–165.
6. **A mean field approach to the quasineutral limit for the Vlasov-Poisson equation,** in collaboration with Megan Griffin-Pickering.
SIAM J. Math. Anal. 50 (2018), no. 5, 5502–5536.
5. **Quantization of measures and gradient flows: a perturbative approach in the 2-dimensional case,** in collaboration with Emanuele Caglioti and François Golse.
Ann. Inst. H. Poincaré Anal. Non Linéaire 35 (2018), no. 6, 1531–1555.
4. **Quasineutral limit for Vlasov-Poisson via Wasserstein stability estimates in higher dimension,** in collaboration with Daniel Han-Kwan.
J. Differential Equations 263 (2017), no. 1, 1–25.
3. **The quasineutral limit of the Vlasov-Poisson equation in Wasserstein metric,** in collaboration with Daniel Han-Kwan.
Comm. Math. Sci. Vol. 15 (2017), no. 2, 481–509.
2. **Asymptotic quantization for probability measures on Riemannian manifolds.**
ESAIM Control Optim. Calc. Var., 22 (2016), no. 3, 770–785
1. **A gradient flow approach to quantization of measures,** in collaboration with Emanuele Caglioti and François Golse.
Math. Models Methods Appl. Sci., 25 (2015), no. 10, 1845–1885.

Preprints

1. **Derivation of Yudovich solutions of Incompressible Euler from the Vlasov-Poisson system** in collaboration with Immanuel Ben-Porat and Alexandre Rege .
2. **Asymptotic Quantization of Measures on Riemannian Manifolds via Covering Growth Estimates** in collaboration with Ata Deniz Aydin.
3. **Enhanced Stability in Quantum Optimal Transport Pseudometrics: From Hartree to Vlasov-Poisson** in collaboration with Laurent Lafleche.
4. **Stability in Quasineutral Plasmas with Thermalized Electrons** in collaboration with Megan Griffin-Pickering.

Mentoring activity

Post-docs

- 2023-2025 Dr. Stefano Rossi, (jointly with Prof. Klaus Widmayer), *UZH-ETH Zürich.*
 2022-present Dr. Simon Becker, *ETH Zürich.*
 2021-present Dr. Alexandre Rege, *ETH Zürich.*
 2020-2021 Dr. Ludovic Cesbron, *ETH Zürich.*

PhD Students

- 2023-present Thérèse Moerschell, *ETH Zürich.*
 2022-present Ata Deniz Aydin, *ETH Zürich.*
 2020-present Antoine Gagnebin, *ETH Zürich.*
 2016-2019 Megan Griffin-Pickering, *University of Cambridge*, co-supervision with Prof. Clément Mouhot.

Master students

- 2023-2024 Yuxiu Zhang (jointly with Dr. Hyunju Kwon), *ETH Zürich.*
 2023-2024 Aurel Zürcher (jointly with Dr. Alexandre Rege), *ETH Zürich.*
 2023-2024 Ludovic Marsland, *ETH Zürich.*

- 2022-2023 Florian Spicher (jointly with Prof. Benjamin Schlein), *ETH Zürich*.
- 2021-2022 Camilla Naiaretti, *ETH Zürich*.
- 2021-2022 Jonathan Junné, *ETH Zürich*.
- 2021-2022 Ata Deniz Aydin, *ETH Zürich*.
- 2020-2021 Arianna Piana (jointly with Dr. Giuseppe Genovese), *ETH Zürich*.
- 2020-2021 Zhan Feng Lim (jointly with Dr. Ludovic Cesbron), *ETH Zürich*.
- 2019-2020 Antoine Gagnebin, *University of Neuchâtel*.

Bachelor students

- 2024 Eva Lia Tarquini, *ETH Zürich*.
- 2022 Ludovic Marsland, *ETH Zürich*.

Semester papers

- 2022 Filippo Paiano, *Università di Pisa*.
- 2022 Florian Spicher (jointly with Prof. Benjamin Schlein), *ETH Zürich*.
- 2021 Jonathan Junné, *ETH Zürich*.
- 2020 Matteo Giardi, *ETH Zürich*.

Reading seminars

- 2022-present I supervise several reading seminars every year.

Conference organization

- Feb 2024 **Workshop at the SwissMAP Research Station, Les Diablerets: Phase mixing, kinetic theory and fluid mechanics.** Co-organised with Prof. Michele Coti-Zelati (Imperial College London).
- Jan 2024 **FIM conference: Kinetic and hydrodynamic PDEs. Conference in honour of François Golse's 60th birthday.** Co-organised with Prof. Laurent Desvillettes (Université de Paris) and Prof. Laure Saint-Raymond (IHES, Paris).
- Nov 2023 **Banach Center – Oberwolfach Graduate Seminar: Optimal Transport Theory and Hydrodynamics (from Euler to Monge and vice versa).** Co-organised with Prof. Yann Brenier (ENS Paris) and Prof. Filippo Santambrogio (University Lyon 1).
- May 2023 **2023 BIRS-IMAG Workshop in Granada: Nonlinear diffusion and nonlocal interaction models: entropies, complexity, and multi-scale structures.** Co-organised with Prof. Matteo Bonforte (Universidad Autonoma de Madrid & ICMAT), Prof. Katy Craig (University of California, Santa Barbara), and Prof. Marco Di Francesco (Università degli Studi dell'Aquila).
- Jul 2022 **FIM conference: When Kinetic Theory meets Fluid Mechanics.** Co-organised with Prof. Mahir Hadžić (UCL London) and Prof. Alexis Vasseur (UT Austin).
- Oct 2018 **Oberwolfach Seminar: Optimal Transport Theory and Hydrodynamics (from Euler to Monge and vice versa).** Co-organised with Prof. Yann Brenier (ENS Paris) and Prof. Filippo Santambrogio (University Lyon 1).

Teaching

Graduate

- fall 2023 Mini-course at the Banach Center – Oberwolfach Graduate Seminar: *Optimal Transport Theory and Hydrodynamics (from Euler to Monge and vice versa)*.
- fall 2022 Graduate mini-course *An introduction to the Vlasov-Poisson system*, at *CIRM*, Marseille, France.
- spring 2022 *An introduction to mean-field limits for Vlasov equations*, at *ETH Zürich*.

- fall 2021 Graduate mini-course *Optimal Transport Crash Course*, at the *Geometric Methods in Optimization and Sampling Boot Camp*, *Simons Institute for the Theory of Computing*.
- spring 2021 *Topics in non-collisional Kinetic Theory*, at *ETH Zürich*.
- spring 2020 *Topics in Partial Differential Equations*, at *ETH Zürich*.
- fall 2018 Graduate mini-course *Optimal transport methods in non-collisional Kinetic Theory*, at the Oberwolfach Seminar: *Optimal Transport Theory and Hydrodynamics (from Euler to Monge and vice versa)*.

Undergraduate

- spring 2024 Analysis IV for DMATH, at *ETH Zürich*.
- fall 2023 Analysis III for ITET, at *ETH Zürich*.
- spring 2023 Analysis IV for DMATH, at *ETH Zürich*.
- fall 2022 Analysis III for ITET, at *ETH Zürich*.
- fall 2021 Analysis III for ITET, at *ETH Zürich*.
- fall 2020 Analysis III for ITET, at *ETH Zürich*.
- fall 2019 Analysis III for ITET, at *ETH Zürich*.
- spring 2018 Calculus & Probability I (tutorial), at *Durham University*.
- spring 2018 Analysis I (tutorial), at *Durham University*.
- fall 2017 Partial Differential Equations III/IV, at *Durham University*.
- fall 2017 Calculus & Probability I (tutorial), at *Durham University*.

Service to the mathematical community

Editorial work

- 2024-present Associate editor of *Bulletin des sciences mathématiques*.
- 2022-present Associate editor of *Kinetic and Related Models*.

Academic service at ETH Zürich

- Mar 2023 Invited panelist, *Zürich Graduate School of Mathematics Forum*, *ETH Zürich* and *UZH*.
- 2021-present Chair of the *Zürich Colloquium in Mathematics*.
- 2021-present Co-organiser of the *Kinetic theory* seminar at *ETH Zürich* and *Universität Basel*.
- 2020 Hiring committee member for a SwissMAP Assistant Professorship in Mathematical Physics.
- 2019-present Member of the GoMath Steering Committee.
- 2019-present Co-organiser for the *Zürich Colloquium in Mathematics*.
- 2019-present Co-organiser of the *PDE and Mathematical Physics* seminar at *ETH Zürich* and *UZH*.
- 2019-present Co-organiser of the *Analysis* seminar.

Academic service at other institutions

- 2024 Member of the Jury *Prix Schlöfli for excellent doctoral theses in the natural sciences*, SCNAT, Switzerland.
- 2023-present Committee member for the *Ambizione program*, *Swiss National Science Foundation SNSF*, Switzerland.
- 2023-present Committee member for Catalina-Andreea Jurja at *UZH*, Switzerland.
- 2023 Committee member for Matthieu Ménard's Phd. degree at the *Université de Grenoble Alpes*, France.
- 2023 Committee member for Alain Blaustein's Phd. degree at the *Institut de mathématiques de Toulouse*, France.

- 2023 External referee for Valeria Iorio's Phd. degree at *Università degli Studi dell'Aquila*, Italy.
- 2023 External referee for Stefano Rossi's Phd. degree at *University of Rome Sapienza*, Italy.
- 2022-present Expert advisor for EPSRC grants, UK.
- 2021-2022 Expert advisor for *Cofund MathInGreaterParis* (cofund post-doctoral fellowships).
- 2021 Hiring committee member for a Full Professor position at the *Université Côte d'Azur*, Nice, France.
- 2021-2022 Secretary of *SIAG/Analysis of PDEs* for *SIAM*.
- 2020 Committee member for Leo Vivion's Phd. degree at the *Université Côte d'Azur*, Nice, France.
- 2020 Hiring committee member for a Maître de Conférence position at *Université Côte d'Azur*, Nice, France.
- 2018 External Examiner for Davide Piazzoli's Master Phil. degree at the *University of Cambridge*, Cambridge, UK.
- 2018 Hiring committee member for an EPSRC post doctoral position at *Durham University*.
- 2017-2018 Member of the Board of Studies at *Durham University*.
- 2017-2018 Co-organiser of the *Analysis Seminar* at *Durham University*.
- 2015-2017 Co-organiser of the *GAPDE Seminar* at the *University of Cambridge*.
- 2015-2017 Member of the project *PHC Sakura* for French-Japanese cooperation.
- 2014-present I serve as a referee for several international peer-reviewed journals.

Outreach, diversity and inclusion

- 2023 Invited speaker at the *Phi:male Coffee Lecture* at ETH
- 2023-2025 Chair of the European Mathematical Society (EMS) *Committee for Women in Mathematics (WiM)*.
- 2022-present Committee member for the *EMS-EWM Summer Schools at the Institut Mittag-Leffler*.
- 2022-2025 Elected member for the European Mathematical Society (EMS) *Committee for Women in Mathematics (WiM)*.
- 2021 Invited speaker at *Indovina chi viene a cena? Aperitivo con le matematiche*, event addressed to high school students on the occasion of the initiative *May 12, Celebrating Women in Mathematics*.
- 2021 Meeting with high school students in occasion of the *Mirzakhani Day*, IIS Fazzini-Mercantini, Grottammare, Italy.
- 2020-present Elected member of the Standing Committee of *European Women in Mathematics (EWM)*.
- 2019-present Scientific support to *RAW Abruzzo (Resident of Abruzzo in the World)* campus OR.A. with the 20 best students of Abruzzo.
- 2017-2018 Member of the *Athena SWAN* committee (Women in Mathematics) at *Durham University*.
- 2015-2017 I was involved in several activities organised by the L'Oréal Foundation for the dissemination of scientific knowledge. In particular I participated at the program *Pour les filles et la science* giving expository talks (in French) for high school students in the Paris area.
- 2012-2013 I was one of the founders/organisers of the *SSCS, Scuola Sperimentale di Comunicazione della Scienza (Experimental School for Science Communication)* at the Tomo Libreria <https://www.libreriatomo.com> in Rome.

Invitations and communications

Upcoming invited talks

- Apr 2024 *Mathematical Colloquium*, University of Graz, Austria.
- June 2024 *Journées Équations aux Dérivées Partielles 2024*, Aussois (Alps), France.

- June 2024 Seminar at the *Vito Volterra Meeting in Calculus of Variations*, University of Rome La Sapienza, Rome, Italy.
- Invited talks in international conferences
- Nov 2023 Mini-course at the Banach Center – Oberwolfach Graduate Seminar: *Optimal Transport Theory and Hydrodynamics (from Euler to Monge and vice versa)*.
- Sep 2023 Oberwolfach workshop *Classical and Quantum Mechanical Models of Many-Particle Systems*, MFO, Germany.
- Jul 2023 Conference at Imperial College *stability and dynamics in fluid mechanics and kinetic theory*, London, UK.
- Jun 2023 SwissMAP Workshop *Effective theories in classical and quantum particle systems*, Les Diablerets, Switzerland.
- Feb 2023 Opening words at the *Third Austrian Day of Women in Mathematics*, Austria (online).
- Nov 2022 Mini-course at the conference *Kinetic Theory*, CIRM, Marseille, France.
- Sep 2022 Workshop *Optimal Transport on Quantum Structures*, Budapest, Hungary.
- Spring 2022 Program *Frontiers in kinetic theory: connecting microscopic to macroscopic scales - KineCon 2022 (FKT)*, Newton Institute, Cambridge, UK.
- Apr 2022 Workshop *Frontiers in The Interplay Between Probability and Kinetic Theory*, ICMS, Edinburgh, Scotland.
- Apr 2022 Conference *Probability/PDE Interactions: Interface Models and Particle Systems*, CIRM, Marseille, France.
- Mar 2022 Mini-symposium SIAM PD22: Energy-based mathematical methods and thermodynamics
- Oct 2021 Conference *Dynamics and Discretization: PDEs, Sampling, and Optimization*, Simons Institute for the Theory of Computing, Berkeley University of California, USA (online).
- Sep 2021 Conference *New Trends in Nonlinear Diffusion: a Bridge between PDEs, Analysis and Geometry*, Casa Matematica Oaxaca (CMO), Mexico (online).
- Sep 2021 Bootcamp talk at Simons program on *Geometric methods in optimization and Sampling*, Simons Institute for the Theory of Computing, Berkeley University of California, USA (online).
- Aug 2021 *International Congress of Mathematical Physics (ICMP)*, Geneva, Switzerland (online).
- Feb 2021 Oberwolfach Workshop *Applications of Optimal Transportation in the Natural Sciences*, MFO, Oberwolfach, Germany (online).
- Jan 2021 Talk to the *Pre-Conference of the 10th International Conference on Nonlinear Partial Differential Equations and Numerical Analysis (ICNPDENA)* (online).
- Sep 2020 Oberwolfach Workshop *Variational Methods for Evolution*, MFO, Oberwolfach, Germany (online).
- May 2020 Workshop *Hot Topic: Optimal transport and applications to machine learning and statistics*, MSRI, Berkeley CA, USA (online).
- Jan 2020 Winter School *Turbulence in fluids and PDEs*, EPFL, Lausanne, Switzerland.
- Nov 2019 INdAM workshop: Recent advances in kinetic equations and applications *University of Rome Sapienza*, Italy.
- Jun 2019 Conference *People in Optimal Transportation and Applications*, Cortona, Italy.
- Jun 2019 Conference on *Fluids and Variational Methods* in Budapest at the *Rényi Institute at the Hungarian Academy of Sciences*, Budapest, Hungary.
- May 2019 Thematic Program on *Optimal Transport*, ESI, Vienna, Austria.
- Sep 2018 Workshop *Gradient flows: challenges and new directions*, at ICMS, Edinburgh, UK.
- Jun 2018 Workshop *An Analyst, a Geometer and a Probabilist walk into a bar*, at the *University of Cardiff*, UK.

- Jun 2018 Conference *Women in PDEs* at the *University of Oxford*, UK.
- Apr 2018 Workshop *Entropies, the geometry of nonlinear flows, and their applications* at *BIRS*, Banff, Canada.
- Nov 2017 6th edition of the conference *Particle Systems and PDE's*, Nice, France.
- May 2017 Workshop *Nonlocal Partial Differential Equations and Applications to Geometry, Physics and Probability* at *ICTP*, Trieste, Italy.
- Mar 2017 *Oxbridge PDE Conference*, at the *University of Oxford*, UK.
- Dec 2016 Workshop *PDE models for multi-agent phenomena*, *INdAM*, Rome, Italy.
- May 2016 *MAFRAN Kinetic conference*, Cambridge, UK.
- Apr 2016 Workshop *Mixing and nonlinear stability* at American Institute of Mathematics, San José CA, USA.
- Sep 2015 Mini symposium *SciCADE Numerical Methods for Gradient Flows*, Potsdam, Germany.
- Apr 2015 Workshop on *Gradient flows: from theory to application*, at *ICMS*, Edinburgh, Scotland.

Invited talks at seminars/colloquia

- Mar 2024 *Analysis and PDE seminar*, Institut Camille Jordan, Lyon, France.
- Jan 2024 *Seminario di Analisi e Fisica Matematica*, University of Rome, Italy.
- Dec 2023 *Phi:male Coffee Lecture*, VMP, ETH Zurich.
- Mar 2023 Colloquium talk at Cergy Paris Université, France.
- Jan 2023 Seminar talk at Gran Sasso Science Institute, L'Aquila, Italy.
- Dec 2022 Analysis seminar at *Durham University*, UK.
- Nov 2022 *PDE seminar via Zoom* at the *Chinese Academy of Science*.
- Sep 2022 Colloquium at the *SwissMAP General Meeting*, Les Diablerets, Switzerland.
- Jul 2022 Colloquium at *Institute of Mathematics*, University of Potsdam, Germany.
- Jun 2021 *Webinar on Gradient flows for PDEs*, Institut Camille Jordan, Lyon 1, France.
- Nov 2020 Virtual Analysis and PDE Seminar (VAPS) (online).
- May 2020 Seminar at the Department of Mathematics at *University of Pisa*, Italy (online).
- Dec 2019 Oberseminar Analysis at *TU Munich*, Germany.
- Nov 2019 Seminar at *Talks in mathematical physics*, *ETH Zürich*, Switzerland.
- May 2019 Analysis Seminar at the *University of Basel*, Switzerland.
- May 2019 Colloquium at the *University of Vienna*, Austria.
- Jan 2019 Dynamical System Seminar at the *Centro De Giorgi*, Pisa, Italy.
- Jun 2018 Seminar at the *University of Oxford*, UK.
- Jun 2018 Seminar at the *University of Warwick*, Coventry, UK.
- Mar 2018 Analysis Seminar at the *University of Texas at Austin*, TX, USA.
- Mar 2018 Analysis Seminar at the *University of Tor Vergata*, Rome, Italy.
- Feb 2018 Seminar at the *University of Leeds*, UK.
- Feb 2018 Mathematical Physics Seminar at the *University of Bristol*, UK.
- Feb 2018 Analysis Seminar at the *University of Bath*, UK.
- May 2017 Analysis Seminar at the *University of Lille*, France.
- May 2017 Analysis Seminar at *Imperial College of London*, UK.
- Apr 2017 Joint Analysis Seminar at the *University of Leipzig* and at the *Max Planck Institute für Mathematik*, Germany.
- Mar 2017 Analysis Seminar at *King's College London*, London, UK.
- Dec 2016 Seminar at the *Hausdorff Research Institute for Mathematics*, Bonn, Germany.
- Nov 2016 Numerical Analysis Seminar at *Durham University*, UK.

- Apr 2016 Analysis Seminar at *CMU*, Pittsburgh PA, USA.
- Mar 2016 Analysis Seminar at *UT Austin*, TX, USA.
- Mar 2016 Analysis Seminar at *MIT*, Boston, MA, USA.
- Dec 2015 Seminario di Fisica Matematica, Dipartimento di Matematica *Guido Castelnuovo*, Università di Roma *Sapienza*, Italy.
- Nov 2015 Séminaire Analyse-Probabilités du *CEREMADE*, *Paris Dauphine*, France.
- Nov 2015 Séminaire de l'équipe EDP et Analyse Numérique, *Laboratoire J. A. Dieudonné*, Nice, France.
- Nov 2015 Séminaire Laurent Schwartz EDP et applications, *Ecole Polytechnique*, Palaiseau, France.
- Oct 2015 Seminar of Geometric Analysis and Partial Differential Equations at the *Department of Pure Mathematics and Mathematical Statistics*, Cambridge, UK.
- May 2015 Analysis Seminar at *IST Austria*, Vienna, Austria.
- Mar 2015 Séminaire des doctorantes et des doctorants *CMAP/CMLS*, *Ecole Polytechnique*, Paris, France.
- Dec 2014 FIM Analysis Seminar, *ETH*, Zürich, Switzerland.
- Nov 2014 Sèminaire des Jeunes Chercheurs du *CEREMADE*, *Paris Dauphine*, France.

Visiting periods

- Oct 2018-Mar 2019 Visiting Professor at *ETH Zürich*, Switzerland.
- Apr 2018 *University of Texas at Austin*, TX, USA. Invited by Prof. Alexis Vasseur.
- Apr 2017 *University of Leipzig*, Germany. Invited by Prof. László Székelyhidi.
- Apr 2016 *Carnegie Mellon*, Pittsburgh, USA. Invited by Prof. Irene Fonseca.
- Mar 2016 *MIT*, Boston, USA. Invited by Prof. Gigliola Staffilani.
- Nov 2015 *CEREMADE*, Paris Dauphine, France. Invited by Prof. Francesco Salvarani.
- May 2015 *IST Austria*, Vienna, Austria. Invited by Prof. Jan Maas.
- Oct 2014 *Imperial College*, London, UK. Invited by Prof. José Carrillo.
- Oct 2014 *University of Cambridge*, UK. Invited by Prof. Clément Mouhot.
- Sep-Dec 2014 *ETH Zürich*, Switzerland. Invited by Prof. Tristan Rivière.
- Mar-Apr 2014 *University of Texas at Austin*, TX, USA. Invited by Prof. Irene Gamba.
- Mar 2014 *University of Zürich*, Switzerland. Invited by Prof. Camillo De Lellis.

Memberships

1. The Mathematics of Physics SwissMAP.
2. International Association of Mathematical Physics (IAMP).
3. European Women in Mathematics (EWM). From 2020 I'm a member of the Standing Committee.
4. Society for Industrial and Applied Mathematics (SIAM).
5. Swiss Mathematical Society (SMS).
6. European Mathematical Society (EMS). From 2023 I'm chair of the EMS Committee for Women in Mathematics (WiM).
7. Unione Matematica Italiana (UMI).
8. ETH Women Professors Forum (WPF).