

Andrea Mazzino

Full Professor of Physics of the Earth, Planets, Space and Climate (DICCA, University of Genoa); INFN Research Contract – Genoa Section

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EDUCATION AND TRAINING

- July 1997 — Ph.D. in Physics, University of Genoa. Thesis: Turbulent transport.
- June 1993 — Degree in Physics, University of Genoa. Thesis: Closures in turbulent transport.

ACADEMIC EXPERIENCE

- 2023 – present — Full Professor of Physics of the Earth System, DICCA, University of Genoa.
- 2006 – present — Research Contract, INFN – Istituto Nazionale di Fisica Nucleare.
- 2020 – 2023 — Full Professor of Fluid Dynamics, DICCA, University of Genoa.
- 2012 – 2019 — Associate Professor of Fluid Dynamics, DICCA, University of Genoa.
- 2004 – 2011 — Researcher in Theoretical Physics, Department of Physics, University of Genoa.
- 2001 – 2003 — Researcher, CNR-ISAC (Institute of Atmospheric Sciences and Climate).

ACADEMIC DUTIES

- 2023 – present — Chair, National Scientific Qualification (ASN) Commission – Astronomy, Astrophysics, Earth and Planetary Physics.
- 2021 – present — Member, University Research Commission, University of Genoa.
- 2018 – present — Coordinator, DICCA Research Commission, University of Genoa.
- 2012 – present — Director (Genoa Section), INFN Specific Initiative “FIELDTURB.”
- 2005 – present — Member of PhD Committees (Physics and Engineering) and selection committees for researchers and post-docs in Italy and abroad.

INVITED TALKS AND LECTURES (last 10 years)

- 30/06/2025 – 05/07/2025 — *Turbulent diffusion and effective transport: a multiscale perspective*, Lecturer, International Summer School/Workshop, Beijing Institute of Technology (Zhuhai), Guangdong, China.
- 09–13/12/2024 — *Overcoming Richardson's law: fiber-based measurements for assessing the multi-point statistics of turbulence*, AGU 2024, Washington, D.C., USA.
- 03–05/05/2023 — *Using slender objects for sensing flow properties*, EUROMECH Colloquium 628, Nice, France.
- 07–11/09/2020 — *Tracking an assembly of rigid fibers to reconstruct the velocity strain tensor*, ICTS-TIFR, Bangalore, India (online due to Covid-19).



- 04–06/03/2020 — *Fiber Image Velocimetry*, “1st BICTAM-CISM Symposium on Dispersed Multiphase Flows,” Tsinghua University, Beijing, China (online due to Covid-19).
- 26–28/09/2018 — *Mineral dust aerosols transported in the western Mediterranean*, Workshop “Mathematics for Atmospheric–Biospheric Science,” Hyytiälä, Finland.
- 20–24/11/2017 — *Fluttering instability for energy generation at milliWatt scales*, Workshop “Mathematics for Atmospheric–Biospheric Science,” Levi, Finland.
- 08–10/09/2016 — *Energy harvesting by flapping foils*, “Nonequilibrium Statistical Mechanics and Turbulence,” CECAM, Rome, Italy.
- 25–28/08/2015 — *Rayleigh–Taylor Turbulence*, European Turbulence Conference (ETC15), Delft, Netherlands.
- 07–09/03/2015 — *Eddy-diffusivity in turbulent transport*, COST Action MP1305, Lecce, Italy.

SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS

- PI sub-project (Alxtremell) — Alxtreme, 1/4/2023 – 7/2025, Fondazione San Paolo and CdP.
- PI — MINIERA, 06/2020 – 11/2023, Fondazione San Paolo.
- PI — HI-FI SIM Covid19 FISR, 12/2020 – 05/2021, MIUR.
- WP leader — Sicomar Plus, 06/2018 – 05/2021, Interreg EU.
- WP leader — AERNOSTRUM, 05/2020 – 04/2023, EU MED Programme.
- Action leader & WP leader — Flagship Project RITMARE, 2012–2016, MIUR.
- PI — PRIN 2012-2015: “Energy harvesting in laminar flows” (MIUR).

INTERNATIONAL TEACHING OR RESEARCH ASSIGNMENTS (fellowships)

- 2025 — Visiting Professor, Beijing Institute of Technology, China.
- 1998–1999 — Henri Poincaré Research Fellowship, CNRS – Observatoire de Nice (France).

EDITORIAL BOARDS

- 2015–2020 — Managing Editor, international journal *Meccanica*.

AWARDS AND HONORS

- 2000–2001 — INFN Prize for outstanding young researchers in Theoretical Physics (annual research fellowship).
- 2017 – present — Listed among the Top Italian Scientists (Engineering sector).

TECHNOLOGY TRANSFER

- 2012 – present — Founding partner of the academic start-up PM_TEN (spin-off UniGe).
- Consolidated third-party research activities on all fundamental research themes carried out.

OTHER TITLES

- Memberships: INFN Specific Initiative “FIELDTURB” (since 2004); CINFAI (2004–2018).
- Refereeing and panels: ANR, Israel Science Foundation, MIUR; journals: *PNAS*, *Phys. Rev. Lett.*, *J. Fluid Mech.*, *Phys. Fluids*, *Appl. Energy*, *J. Atmos. Sci.*, etc.
- Selected international collaborations: ETH-Zurich; KTH-Stockholm; Okinawa Institute of Science and Technology; University of Wisconsin-Madison; Université de Bordeaux; University of Helsinki; Weizmann Institute of Science; Université de Nice; Beijing Institute of Technology.

- Supervision: 15 PhD students; 30 MSc theses; 11 post-docs (since 2007).
- Bibliometrics (Google Scholar, Sept. 2025): H-index 45; i10-index 118; ~6560 citations; >180 publications.