

# CURRICULUM VITAE



## PERSONAL INFORMATION

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Nationality	Italian
Date of birth	24 NOVEMBER 1958

## WORK EXPERIENCE

• From - to	16/2/2015 - today: Director of IGG-CNR
	1/1/2007 - 15/2/2015: Research Director, ISAC-CNR
	1/1/2002 - 31/12/2006: Senior Researcher, ISAC-CNR
	1/9/1987 - 31/12/2001: Researcher. Institute of Cosmogeophysics, CNR

## EDUCATION AND TRAINING

• From - to	Research Doctorate in Physics (1984-1987), University of Torino
	Master degree in Physics (1977-1982), University of Torino

MOTHER TONGUE	ITALIAN
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### OTHERS

	ENGLISH
• Reading	EXCELLENT
• Writing	EXCELLENT
• Speaking	EXCELLENT
	FRENCH
• Reading	GOOD
• Writing	ELEMENTARY
• Speaking	GOOD

## RESEARCH INTERESTS

Earth System Science. Climate dynamics and geosphere-biosphere interaction. Ecosystem dynamics modelling in extreme environments. Impact of climate change on water cycle, wildfires and ecosystems.

## AWARDS

- Recipient of the Golden Badge Award of the European Geophysical Society (EGS) in 1997 for his activities in the framework of the EGS Working Group "Nonlinear Processes in Geophysics".
- Recipient of a Dozor Fellowship of the Ben Gurion University in Beer Sheva (Israel) where he stayed as an "Invited visiting scientist" in 1996, and subsequently as a "EU LSF Fellow".
- Recipient of a JILA Visiting Fellowship of the University of Colorado in Boulder, USA, where he stayed as an "Invited visiting scientist" in 1997.
- Faculty member of the Summer Program on Geophysical Fluid Dynamics of the Woods Hole Oceanographic Institution, MA, USA, from 2005 to 2019.
- Invited professor at the Ecole Normale Supérieure in Paris, December 2005.
- Invited professor at the Université Pierre et Marie Curie in Paris, January 2008.
- Invited professor at the Université Pierre et Marie Curie in Paris, February 2009.
- Corresponding member of the "Academy of Sciences" of Turin, Italy.

## PROFESSIONAL ACTIVITY

- Coordinator of the PON IR LifeWatch Plus, MIUR (2019-2024).
- Chair of the Financial Committee of the European Research Infrastructure LifeWatch ERIC
- Italian Representative in the "Terrestrial Working Group" of IASC – International Arctic Science Committee
- Italian Representative in the working group "CAFF – Conservation of Arctic Flora and Fauna" of the Arctic Council
- Coordinator of "Research Track #3" (Critical Zone and ecosystems) of the joint ENI-CNR research center on Arctic dynamics and former representative of CNR in the management committee of the ENI-CNR agreement.
- Coordinator of the H2020 project ECO-POTENTIAL: Improving Future Ecosystem Benefits Through Earth Observations (2015-2019).
- Coordinator of the "Progetto di Interesse Strategico NextData", MIUR (2012-2018).
- Unit coordinator in the projects eLTER Plus, EU ERA-NET ERA4CS, "Two-dimensional turbulence, vortices and geophysical flows" (1993-1995), "Variability of the North Atlantic Storm Track" (1995-1997), "Stirring and Mixing" (2002-2006), "ACQWA" (2008-2013), ALCOTRA "Galliformi Alpini" (2010-2012) and in several national projects (e.g., PRIN).
- Managing Editor of the journal "European Physics Journal Plus" (till 2020)
- Associate Editor of the journal "Environmental Science and Policy" (till 2017).
- Coordinator of "GEO-ECO: The GEO Global Ecosystem Monitoring Initiative" since 2017.
- Coordinator of the GEO Task "Ecosystems" del Group on Earth Observations - Global Earth Observation System of Systems (GEO/GEOSS) till 2017.
- Coordinator of the Collaborative Programme "Changes in the hydrological cycle" of the European Climate Research Alliance (ECRA) (2012-2015).
- Coordinator of the SHARE "PAPRIKA Italy" project on climate change in Karakoram.
- Vice-president for Europa of the *Committee for Mathematical Geophysics* of the International Union of Geodesy and Geophysics (IUGG), from 2001 to 2007.
- Member of the editorial board of the AGU journal *Water Resources Research* (2008-2009).
- Member of the advisory board of the journal *CHAOS* from 1997 to 2019.
- Member of the Steering Committee of the programme *Nonlinear Science* of the European Science Foundation (ESF) from 1993 to 1995 and the programme *TAO: Transport in the Atmosphere and the Ocean* of the ESF from 1995 to 2000.
- Topical Editor of the journal *Nonlinear Processes in Geophysics*, from 1993 to 1995, and from 2005 to 2009.
- Member of the editorial board of the journal *Survey in Geophysics* from 1991 to 1997.
- Topical Editor of the journal *Annales Geophysicae* from 1991 to 1994.
- Coordinator of the "Interdisciplinary Working Group on Nonlinear Processes in Geophysics" of the European Geophysical Society (EGS) from 1991 to 1994.

## TEACHING ACTIVITY

- Coordinator, from 1994 to 2008, of the Franch-Italian school "Fundamental Issues in Geophysical and Environmental Fluid Mechanics".
- Principal Lecturer at the "Summer Program on Geophysical Fluid Dynamics" of the Woods Hole Oceanographic Institution (WHOI), 1998 and 2010.
- Member of the Board of the Doctorate program in Earth Sciences, Tuscany.
- Member of Doctorate Thesis jury in France (ENS, Paris, Lyon), Sweden, The Netherlands. Member of the jury for "These d'Habilitation", France.
- Lecturer in Atmospheric Dynamics in training courses on Radarmeteorology, Meteorological Forecast, Civil Protection.
- Lecturer in "Dynamics of Extended Systems", University of Torino (till 2015).
- Lecturer in Climate Physics, University of Torino (2006-2008).
- Lecturer in Atmospheric Dynamics, University of Genova (2002-2008).
- Lecturer in "Meteo-climatology", University of Pisa (2017-2020).
- Advisor of more than 30 "Laurea" Theses (bachelor and master).
- Advisor of more than 20 Research Doctorate Theses.

## ORGANIZATION OF SCHOOLS AND MEETINGS

- 2018-2019 Director of the international school "Critical Zone and Ecosystem Dynamics", Ceresole Reale, July 2018 and July 2019.
- 2016 Director of the course "Cross-scale interactions in the coupled geosphere-biosphere system" of the French-Italian school on "Fundamental Issues in Geophysical Fluid Mechanics and Climate", Valsavarenche, June 2016.
- 2014 Director of the course "Climate Physics and Dynamics", Geophysical Fluid Dynamics Summer Program, Woods Hole Oceanographic Institution, MA, USA, June-August 2014.
- 2014 Organiser of the session "Climate change and the mountain environment" and Key Lecturer at the XII International Congress of the Association of Engineering Geology, Torino.
- 2014 Organiser of the session "Climate change and the Earth System: understanding the past, analyzing the present and predicting future scenarios" at the congress "The future of Italian Geosciences", Milano.
- 2014 member of the Scientific Committee of the international symposium on the 100th anniversary of the Italian Glaciological Committee, Torino.
- 2013 Director of the course "The Fluid Dynamics of Climate", International Center for Mechanical Sciences (CISM), Udine, August 2013.
- 2013 Director of the course "Climate Change and the Mountain Environment" of the French-Italian school "Fundamental Issues in Geophysical Fluid Mechanics and Climate", Valsavarenche, June 2013.
- 2011 Director of the course "Regional climate dynamics in the Mediterranean and beyond: An Earth System perspective" of the French-Italian school "Fundamental Issues in Geophysical Fluid Mechanics and Climate", Valsavarenche, June 2011.
- 2009 - 2011 Member of the Organization Committee of the "Summer School on Biogeodynamics and Earth System Sciences", Istituto Veneto di Scienze, Lettere e Arti, Venezia.
- 2008 Director of the course "Interaction and coevolution of climate and biosphere" of the French-Italian school "Fundamental Issues in Geophysical Fluid Mechanics and Climate", Valsavarenche, June 2008.
- 2004 Director of the course "Transport in geophysical flows" of the French-Italian school "Fundamental Issues in Geophysical and Environmental Fluid Mechanics", Etroubles, June 2004.
- 2002 Organiser of the International conference of the "Committee for Mathematical Geophysics" of IUGG, on "Pattern and Form in Earth Dynamics", Torino, June 2002.
- 2001 Chairman of the workshop EUROMECH 428 "Transport by coherent structures

in environmental and geophysical flows”, Torino.  
 2000 Director of the course “Geomorphological Fluid Mechanics” of the French-Italian school “Fundamental Issues in Geophysical and Environmental Fluid Mechanics”, Etroubles, June 2000.  
 1999 Organiser of the international workshop ESF-TAO on “Heat, salinity and tracer transport in the Mediterranean Sea”, Torino.  
 1996 Scientific secretary at the Scuola Internazionale di Fisica “E. Fermi”, Varenna, on “Past and present variability of the solar-terrestrial system: Measurement, data analysis and theoretical models”, Varenna.  
 1994 Co-chairman of the workshop Eurotherm 39 “Heat Transfer Enhancement by Lagrangian chaos and turbulence”, Nantes, France.  
 1994 Director of the “Study Center” of the European Science Foundation on “Dynamics of transport in fluids, plasmas and charged beams”, Torino.  
 1993 Director of the NATO Advanced Research Workshop on “Chaotic advection, tracer dynamics and turbulent dispersion”, Sereno di Gavi.  
 1993 Member of the organizing committee of the international workshop “Applications of Time Series in Astronomy and Meteorology”, Padova.  
 1992 – today, Organiser of sessions at the “Annual Assemblies” of the European Geophysical Union (formerly European Geophysical Society).

#### DISSEMINATION ACTIVITIES

Author of the dissemination volume “Coccodrilli al Polo Nord e ghiacci all’Equatore” on past and current climate dynamics (publisher: Rizzoli, 2021).  
 Editor of the volume “Il mutamento climatico: processi naturali e intervento umano” of the Academy of Sciences of Torino (in Italian), Publisher: il Mulino (2013).  
 Author of the volume for schools “What is Global Warming?” (in Italian and English) Publisher: Editoriale Scienza/Giunti.  
 Invited speaker at the meeting “Clima, Agricoltura, Energia”, Italian Parliament, 22/06/2010.  
 Invited speaker at the meeting “Acqua, clima e sicurezza”, Italian Parliament, 03/11/2010.  
 Editor of the dissemination volume “Clima, cambiamenti climatici globali e loro impatto sul territorio nazionale” (in Italian), ISBN: 978-88-903028-0-0 (2009).  
 Scientific advisor for documentary movies on climate and its impacts on ecosystems: *Going North* (in Italian and English), *I gladiatori della montagna* (in Italian with subtitles in French), *High mountain ecosystems* (in Italian and English).  
 Contributor to scientific exhibitions on climate, impacts of climate change in mountain environments, in collaborations with museums and parks.  
 Author of popular articles in *TuttoScienze (La Stampa)*, *Il Giornale di Fisica*, *SAPERE*, *La Rivista della Natura*, *Piemonte Parchi*.  
 Speaker in public dissemination events.

#### PUBLICATIONS

Author of more than 180 articles in the international literature (ISI journals).  
 Editor of five volumes and two special journal issues.

