



Giorgio Boni

Researcher

✉ giorgio.boni@unige.it

☎ +39 010 335 2238

Education and training

1992

Laurea degree in Civil Engineering

110/110 e lode

University of Genova - Genova - IT

1997

Doctorate in Hydrodynamics

University of Padua - Padua - IT

Academic experience

2000 - 2020

Assistant Professor

University of Genoa - Genoa - IT

Teaching Management of M.Sc courses Research

2020 - ONGOING

Associate Professor

University of Genoa - Genoa - IT

Teaching Management of M.Sc courses Management of Research Units

Work experience

2008 - 2012

Scientific Director

CIMA Research Foundation - Savona - IT

Direction of main scientific activities of the International Centre on Environmental Monitoring - CIMA Foundation

2012 - 2018

Consultant

CIMA Research Foundation - Savona - IT

Consultancy for the development of research and technology transfer activities in the field of remote sensing applications to hydrometeorology and hydroclimatology.

2015 - 2019

Division President Natural Hazards

European Geosciences Union (EGU) - Munich - DE

Responsible for the program of the annual EGU general assembly for the natural hazards topic governance of the Natural Hazards division

Language skills

Italian

Mother tongue

French

Independent

English

Independent

Teaching activity

Since 2000, teacher at the University of Genoa, Faculty of Engineering (now Polytechnic School) of the following Bachelor's and Master's Degree courses in Italian language: hydraulic constructions, management of water resources, fluid mechanics, hydrology and of the following Master's Degree courses in English language: echo-hydrology, probability and statistics, natural risk management & climate change dynamics, hydro-meteorological hazards and integrated risk management

A.Y. 2003/04 and 2004/2005: lecturer in charge of the course in Water Resources Management, Degree, University of Basilicata, Matera branch.
From 19-09-2011 to 21-09-2011: Series of lectures for the European master course in Meteorology, University of Barcelona (Spain), on topics related to hydrometeorology, hydrological modeling, and applications of satellite observations to hydrometeorology.

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

Since 2002 supervisor of 9 Ph.D. students:

Francesca Sini, (cycle XVIII), thesis "Satellite data assimilation for the estimation of surface energy fluxes", dottorato in Metodi e tecnologie per il monitoraggio ambientale, Università della Basilicata.

Federica Martina (cycle XXIII), tesi "A Multilayer dynamic model for energy and mass exchange between soil, snow cover and atmosphere suitable for satellite data assimilation", doctorate in System monitoring and management of environmental risk, Università di Genova.

Mattia Fiorini (ciclo XXVI), doctorate in System monitoring and management of environmental risk, Università di Genova.

Paola Laiolo (cycle XXVII), thesis "Combining soil moisture from observations and models", doctorate in MMonitoring systems and management of environmental risks, Università di Genova.

Valerio Basso (cycle XXIX), thesis "Impacts of the EO-based representation of vegetation on the energy and mass flux dynamics at river basin scale", doctporate in systems monitoring, Università di Genova.

- development of operational procedures for rapid mapping of flood and flash flood risk
- mapping of hydrological parameters with satellite techniques
- flood risk forecast and management
- flood Early warning systems

Other professional activities

1998-1999 Scientific Responsible of the project “Creation and development of a monitoring and early warning system for the establishment of the experimental Meteo-Hydrological centre of the Liguria Region”.

Commissioned by the Liguria Region.

1999 PI of the EU project Interreg II Italy Switzerland: “Experimental Realization of the atlas of heavy rains over the Western Alps between Italy and Switzerland”.

2000 Scientific responsible of the project “Flood risk prone areas of the Centa River”. Commissioned by the province of Savona.

2003-2005 Scientific responsible of the National Project PRIN 2003: “sviluppo di modelli di assimilazione dei dati da satellite e radar per il bilancio idrologico alla superficie del suolo, integrati con modelli meteorologici ad area limitata” (development of a technique for the assimilation of satellite and radar data in soil surface hydrologic balance models, integrated in limited area models), commissioned by the Italian Ministry of Education and Scientific Research.

2005-2006 PI of activity 5 (Soil atmosphere interactions) of the PROSCENIO Project – Commissioned by the Italian Civil Protection.

2007- 2011 PI of the project Opera (Operational EO-based RAInfall-runoff forecast) “Civil Protection from floods” commissioned by the Italian Space Agency.

2013-2015 PI of the Project “EO-based CHange detection for Operational Flood Management – ECHO-FM” commissioned by the Italian Space Agency

2015-2018 member of the Project Management Board, Copernicus emergency management service risk and recovery mapping, Framework Service Contract No. 259811

2016-2019 Scientific consultant in the framework of the ASI Project “MIDA (Mappe IDrologiche Assimilate) – Hydrologic assimilation of Sentinel 1 and Cosmo-SkyMed data for the production of “soil moisture” maps at national scale.

October 2017- December 2018: Scientific coordination of the project CEOS Disaster Risk Management (CEOS DRM), Italian Space Agency

Since 2019: coordination of the DICCA-UNIGE unit of the project “G-Class Phase-0 Science and Requirements”, University of Cranfield (GB) - P13154 EFA3036N