

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)

GIORGIO BONI

Address(es)

Via Magliotto, 2, University Campus, Marchi Building,
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Giorgio.boni@cimafoundation.org

Nationality

Italian

Date of birth

06/06/1968

Gender

M

Desired employment / Occupational field

Professor

Work experience

Dates

October 1998 – October 1999

Occupation or position held

technical assistant

Main activities and responsibilities

Implementation and development of a monitoring and early warning system for the establishment of the Regional Hydro-Meteorological Centre (Liguria-Italy)

Name and address of employer

University of Genoa
Via Balbi 5
I-16100 Genova, Italy

Type of business or sector

Applied research

Dates

November 1999 – October 2000

Occupation or position held

technical officer

Main activities and responsibilities

Coordination of the activities of the University of Genoa in the framework of the EU project INTERREG IIC "management of the territory and flood prevention"

Name and address of employer

University of Genoa
Via Balbi 5
I-16100 Genova, Italy

Type of business or sector

Applied research

Dates

November 2000 – present

Occupation or position held

Assistant Professor

Main activities and responsibilities

Research and teaching activity focused on understanding the underlying physics of natural phenomena that cause natural disasters, with special attention to hydro-meteorology.
Vice-president of the Environmental Engineering Course
Coordinator of international relations for the courses related to Environmental Engineering
Co-ordination of several research projects

Name and address of employer | University of Genoa
Via Balbi 5
I-16100 Genova, Italy

Type of business or sector | Research and Teaching

Dates | October 2007 – present

Occupation or position held | Scientific director

Main activities and responsibilities | Coordination and evaluation of scientific research activities of CIMA Foundation researchers

Name and address of employer | CIMA Research Foundation
Via Magliotto, 2, University campus, Marchi Building
I-17100 Savona, Italy

Type of business or sector | Management, research and teaching

Education and training

Dates | December 1992

Title of qualification awarded | Laurea degree

Principal subjects/occupational skills covered | Hydraulic engineering

Name and type of organisation providing education and training | University of Genoa (Italy)

Level in national or international classification | ISCED 5

Dates | July 1997

Title of qualification awarded | Doctorate degree

Principal subjects/occupational skills covered | Hydrodynamics

Name and type of organisation providing education and training | University of Padua (Italy)

Level in national or international classification | ISCED 6

Dates | July 1998 – February 1999

Title of qualification awarded | MIT Research Grant

Principal subjects/occupational skills covered | Research activity on data assimilation for hydrological applications

Name and type of organisation providing education and training | Massachussets Institute of Technology
77 Massachusetts Avenue, MA 02139 Cambridge (United States)

Level in national or international classification | ISCED 6

Other language(s) | **English, French**

Self-assessment
European level ()*

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	

English	B2	Vantage	C1	Effective Operational Proficiency	B2	Vantage	B2	Vantage	B2	Vantage
French	B1	Threshold	C1	Effective Operational Proficiency	B1	Threshold	B1	Threshold	A2	Waystage

(*) *Common European Framework of Reference for Languages*

Social Skills and competences	Exercised teaching and communication skills. Excellent ability of dealing with public talks and exposition.
Organisational skills and competences	Ability to coordinate innovative and complex research projects involving various partner institutions. Experience, since 2000, as scientific director and principal investigator of research projects worth a total funding of more than 5 million Euros.
Technical skills and competences	Operational and research experience in hydrometeorology, with particular emphasis in real time flash-flood forecasting, risk mapping, statistical analysis of the extremes. Research activities in the field of hydro-meteorological and eco-hydrological applications of remote sensing techniques. Data assimilation in hydrological models for evaporation and evapotranspiration estimation at regional scale Author and co-author of 19 papers published on international refereed journals, 43 short papers published on proceedings of international conferences and 49 abstracts presented at international conferences.
Computer skills and competences	Internet/Mail: Advanced Presentation tools: Advanced Spreadsheet: Advanced Text processing: Advanced Programming languages: Fortran, Matlab
Other skills and competences	Teaching activity, since 1998, at the Universities of Genoa and University of Basilicata (Italy) in the following fields: Probability and statistics for civil and environmental engineers; Ecohydrology; Water resources management, Hydraulic structures.

Additional information

Since 1994: Teaching activity at the Universities of Genoa and Basilicata (Italy) in the following fields: Probability and statistics for civil and environmental engineers; Ecohydrology; Water resources management, Hydraulic structures.

1995-1997: Research activity at the Institute of Hydraulics, University of Genoa.

1995-2000: Research activity for the Gruppo Nazionale per la Difesa dalle Catastrofi Idrogeologiche (GNDCI) of the National Research Council.

1997-2000: Research activity at Centro di Ricerca in Monitoraggio Ambientale (CIMA) of the University of Genoa.

July 1998 – January 1999: Research activity at the Department of Civil and Environmental Engineering - Massachusetts Institute of Technology in the framework of CNR-MIT collaboration.

Since 1999: scientific collaboration with prof Dara Entekhabi (MIT).

June 1999: Referee of research proposals submitted to the Research Announcement of Opportunity for the use of Meteosat Second Generation data.

Since April 2000: chairperson and convener of conferences of the Natural Hazard session of the EGU;

December 2001: referee of European projects– RTD activities of a Generic Nature – Call EESD-ESD-3Thematic Programme: Energy, Environment and Sustainable Development, Key Action: Sustainable Management and Quality of Water;

From 2002: member of the scientific committee of the Plinius Conference on Mediterranean Storms – EGU;

2002-2005: member of the management committee of the PON project- “Sviluppo dei distretti industriali per l'osservazione della Terra” (Development of industrial districts for earth observation);

Since 2003: management of the international relations for the bachelor and master courses in Environmental Engineering – University of Genoa;

2004-2007: co-ordination of the team for the design of “Applicativo difesa alluvioni” – (satellite-based application for flood defense) - contract COS(OT)- Italian Space Agency;

Since 2000: Experience as Scientific Director of a number of projects exceeding globally 5 million of Euro.

2005-2007: co-ordinator of research unit in the field of “soil-atmosphere interactions - project DPC-CIMA “Proscenio”;

2006-2008: co-ordinator of operational unit – PRIN national project;

November 2007-November 2011: scientific co-ordinator of the project OPERA – integration between Earth Observation data and operational flash flood prediction systems – Italian Space Agency.

Since November 2007: Vice-President of Environmental Engineering Course – University of Genova.

Since June 2008: scientific director of CIMA research Foundation.

Since April 2009: Scientific secretary of the section NH1 - Hydro-Meteorological hazards - of the European geophysical Union

Since 2008: referee for a number of international journals: Journal of Hydrometeorology, Journal of Hydrology, Natural Hazards and Earth System Sciences, International Journal of Remote Sensing, Vadose Zone Journal.

January-September 2011: Coordination of the thirteenth edition of the EGU Plinius Conference on Mediterranean storms

February 2012: member of the Italian Delegation to the 49th Session of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space, Vienna.

2012: Editor of the special issue of the journal Natural Hazards and Earth System Sciences (NHES) dedicated to the XIII EGU Plinius Conference on Mediterranean Storms.

July 2012: Member of the Italian Space Agency mission at the Japanese Space Agency (JAXA) in the activities related to the agreement ASI-JAXA for the use of SAR data for monitoring of natural hazards.

Annexes

List of publications

Peer Reviewed International publications

- [1] Serpico, S., Dellepiane, S., Boni, G., Moser, G., Angiati, E., Rudari, R.: Information Extraction from Remote Sensing Images for Flood Monitoring and Risk Assessment. Proc of the IEEE. 100(10), 2946-2970, 2012
- [2] Parodi, A. Boni, G., Ferraris, L., Siccardi, F., Pagliara, P., Trovatore, E., Fofoula-Georgiou, E., Krantzmueller, D.: The "Perfect Storm": From Across the Atlantic to the Hills of Genoa, EOS Transactions, 93(24), 225-226, 2012
- [3] Boni, G. and F. Siccardi, Scenes and Scenarios: Managing natural disasters by using satellite images to their full potential, Public Service Review: European Science & Technology, 10,128-129, 2011
- [4] Boni, G., Observe to Predict, Predict to Prevent: Cooperation and Technology Transfer between Science and Public Administrations for Civil Protection, Public Service Review: European Science & Technology, 8,194-195, 2010
- [5] Gabellani, S., Silvestro, F., Rudari, R., and Boni, G., General calibration methodology for a combined Horton-SCS infiltration scheme in flash flood modeling, Nat. Hazards Earth Syst. Sci., 8, 1317-1327, 2008. (IF-2007: 1.021)
- [6] Parodi, A., G. Boni, and F. Siccardi, Revisiting the rainfall index question: a new parsimonious method of mapping the rainfall index in mountainous environment. Journal of Hydrometeorology, DOI:10.1175/2007JHM900.1, 2008
- [7] Sini, F., G. Boni, F. Caparrini, and D. Entekhabi, Estimation of large-scale evaporation fields based on assimilation of remotely sensed land temperature, Water Resour. Res., 44, W06410, DOI:10.1029/2006WR005574, 2008
- [8] Baudena, M., G. Boni, L. Ferraris, J. von Hardenberg and A. Provenzale, Vegetation response to rainfall intermittency in drylands: results from a simple ecohydrological box model. Adv Water Resour., DOI: 10.1016/j.advwatres.2006.11.006, 30, 1320-1328, 2007. (IF: 1.817)
- [9] Gabellani, S., G. Boni, L. Ferraris, J. von Hardenberg and A. Provenzale, The propagation of uncertainty from rainfall to runoff: A simulation study. Adv Water Resour., DOI:10.1016/j.advwatres.2006.11.015, 30, 2061-2071, 2007. (IF: 1.817)
- [10] Boni, G., L. Ferraris, F. Giannoni, G. Roth, R. Rudari, Flood probability analysis for un-gauged watersheds by means of a physically based hydrologic model. Adv Water Resour., doi:10.1016/j.advwatres.2006.08.009, 30, 2135-2144, 2007. (IF: 1.817)
- [11] Boni, G., A. Parodi and R. Rudari, Extreme rainfall events: learning from rain gauge time series. Journal of Hydrology, 327, 304-314, 2006. (IF: 2.117)
- [12] Siccardi F., G. Boni, L. Ferraris, R. Rudari, A hydro-meteorological approach for Probabilistic Flood Forecast. Journal of Geophysical Research. vol. 110, No. D5 ISSN: 0148-0227. D05101. 10.1029/2004JD005314, 2005. (IF: 2.784)
- [13] Accadia, C., M. Casaioli, S. Mariani, A. Lavagnini, A. Speranza, A. De Venere, R. Inghilesi, R. Ferretti, T. Paolucci, D. Cesari, P. Patruno, G. Boni, S. Bovo e R. Cremonini, Application of a statistical methodology for limited area model intercomparison using a bootstrap technique. Il Nuovo Cimento, vol. 26 C, n.1, 61-77, 2003.
- [14] Boni, G., D. Entekhabi and F. Castelli, Land data assimilation with satellite measurements for the estimation of surface energy balance components and surface control on evaporation. Water Resources Research. 37(6), 1713-1722, 2001.
- [15] Boni, G., F. Castelli and D. Entekhabi, Sampling strategies and assimilation of ground temperature for the estimation of surface energy balance components. IEEE Transactions on Geosciences and Remote Sensing. 39(1), 165-172, 2001.
- [16] Parodi, A. and G. Boni, Phenomenological validation of a regional rainfall frequency analysis. Physics and Chemistry of the Earth – Part B, 26(9), 649-654, 2001.
- [17] Bolla, R., G. Boni, P. La Barbera, L. Lanza, M. Marchese and S. Zappatore, The tracking and prediction of high intensity rainstorms. Remote Sensing Reviews – edizione speciale "The STORM project". 14(1-3), 151-184, 1996.
- [18] Lanza, L., G. Boni, M. Conti, P. La Barbera, and F. Siccardi, The role of cloud tracking and passive microwave techniques in the short-term prediction of flood hazard on a regional scale. Meccanica 31, 3-14, 1996.
- [19] Boni, G., M. Conti, S. Dietrich, L. Lanza, F. S. Marzano, A. Mugnai, G. Panegrossi and F. Siccardi, Multisensor observations during the event of November 4-6, 1994 over Northern Italy. Remote Sensing Reviews – edizione speciale "The STORM project". 14(1-3), 91-118, 1996.