



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Simone Gabellani**
Address(es) 28, Via Gasca, 16011 Arenzano (GE) - Italy
Telephone(s) +39 0109111618 Mobile +393475171573
E-mail simone.gabellani@cimafoundation.org
Nationality Italian
Date of birth 11.04.1976
Gender Male

Work experience

Dates	May 2009 to present
Occupation or position held	Project Leader
Main activities and responsibilities	Project management; development hydrologic model; research activities in modelling of hydrological physical processes in small and medium catchments snow hydrology and flash flood forecasting; teaching in graduate and post-graduate courses.
Name and address of employer	CIMA Research Foundation - International Centre on Environmental Monitoring – via Magliotto 2 17100 Savona, Italy
Type of business or sector	Applied research
Dates	May 2006 – May 2009
Occupation or position held	Technical position at the University of Genoa with research assignments at CIMA Foundation
Main activities and responsibilities	Developing of tools suited for operative forecasting of flash floods in small and medium catchments. Design and implementation of the Flood-PRObabilistic Operational Forecasting System (Flood-PROOFS) that is operative at the Centro Funzionale of Valle d'Aosta Region and at Compagnia Valdostana delle Acque technical office
Name and address of employer	DIST Department of Communications, Computer and Systems Science – University of Genoa
Type of business or sector	Applied research
Dates	2001 -2006
Occupation or position held	Research collaboration
Main activities and responsibilities	Rainfall field statistical characterization and statistical simulations, quantification of the sensitivity of basin processes to spatial and temporal variations of rainfall fields and to their statistical properties.
Name and address of employer	CIMA Interuniversity Research Centre for Environmental Monitoring, Savona, Italy.
Type of business or sector	Applied research
Dates	2001 to present
Occupation or position held	Assistant professor
Main activities and responsibilities	Teaching activities within the course of Hydraulic Structure of Environmental Engineering
Name and address of employer	University of Genoa, University Campus of Savona, Italy.
Type of business or sector	Education

Education and training

Dates	February 2002 to January 2005
Title of qualification awarded	Ph.D. student in Fluid Dynamics and Processes of Environmental Engineering.
Principal subjects/occupational skills covered	Dissertation title: "The propagation of uncertainty in the rainfall-runoff models for operational flood forecasting". (Language: English). Quantification of the sensitivity of runoff process to spatial and temporal variations of rainfall fields and to their statistical properties; the principal topics relevant to this subject, such as rainfall properties and basin response simulation, have been tackled; it has been shown that the choice of representing rainfall fields in terms of multifractal cascades or as a nonlinear transformation of a linear Gaussian process should be based on physical motivations and not solely on the outcome of data analysis; a review of the main type of stochastic model used to reproduce three dimensional rainfall field has been presented assessing their ability to reproduce the statistics of observed precipitation fields; this activities results flowed into the publication of three papers on international journals.
Name and type of organisation providing education and training	University of Genoa, Italy
Dates	September 1995 – June 2001
Title of qualification awarded	Master of Science in Environmental Engineering, University of Genoa, Italy.
Principal subjects/occupational skills covered	Dissertation title: "Statistical properties of rainfall field downscaling models". Three types of stochastic models used for spatial rainfall downscaling have been developed and validated. Their ability to reproduce the statistics of precipitation fields observed during the GATE radar experiment has been evaluated by using different test statistics.
Name and type of organisation providing education and training	University of Genoa, Italy
Level in national or international classification	108/110
Dates	July 25 th -27 th 2005
Title of qualification awarded	Short Course on Recent Advances in Hydrologic Science, Prof. R.L. Bras, Palermo, Italy
Principal subjects/occupational skills covered	Landscape evolution, effects of vegetation on surface processes, erosion processes.
Name and type of organisation providing education and training	CNR (National Research Council) – MIT (Massachusetts Institute of Technology) - University of Palermo
Dates	October 17 th -24 th 04
Title of qualification awarded	Management and exploitation of advanced radar network Hydrometeorological radar school within VI Plinius Conference.
Principal subjects/occupational skills covered	Operative weather radar applications
Name and type of organisation providing education and training	CIMA Interuniversity Research Centre for Environmental Monitoring
Dates	June 21 st -25 th 2004
Title of qualification awarded	Summer School on Distributed Hydrological Modelling using Geospatial Data and Tools, Prof. E. Vivoni, Roma, Italy.
Principal subjects/occupational skills covered	Modelling of hydrological processes at basin scale.
Name and type of organisation providing education and training	CNR (National Italian Research Council) – MIT (Massachusetts Institute of Technology) - University of Rome Sapienza
Dates	February 1 st -3 rd 2003
Title of qualification awarded	Intensive Course on Dynamic of Convection, Prof. E. Spigel, Savona, Italy.
Principal subjects/occupational skills covered	Convection and nonlinear dynamics in geophysical flows
Dates	February 17 th -20 th 2003
Title of qualification awarded	Intensive Course on Radar Hydrometeorology, Prof. E. Williams, Assisi, Italy
Principal subjects/occupational skills covered	Principle of weather radars and their application for hydrology

Name and type of organisation providing education and training	Italian Civil Protection Department																								
Dates	November 15 th -17 th 2002																								
Title of qualification awarded	Short Course on Polarimetric and Doppler Radar for Weather Observations and Analysis, Neuss, Germany																								
Principal subjects/occupational skills covered	Theory behind radar polarimetry, instrumental characteristics of dual-polarized radar systems, collection, and physical interpretation of dual-polarimetric radar variables. Implications for practical meteorological and hydrometeorological applications.																								
Name and type of organisation providing education and training	Selex Systems Integration GmbH (SELEX-Gematronik)																								
Dates	May 15 th -16 th 2002																								
Title of qualification awarded	National School "Forecasting of Mediterranean storms ground effects and the role of radar meteorology", Torino , Italy																								
Principal subjects/occupational skills covered	Probabilistic meteorological forecasting and the use of weather radar in improving the forecasts																								
Name and type of organisation providing education and training	Italian Civil Protection Department																								
Dates																									
Title of qualification awarded	Physics and Predictability of Rainfall and Floods, Grand Combin Summer School , Saint Oyen, Italy																								
Principal subjects/occupational skills covered	State of knowledge of storms in the Mediterranean environment, in relation to their meteorological and hydrological aspects. Understanding of the physical phenomena including their variability in space and time and on the predictability of heavy rain producing storms and floods. The lectures are devoted to the physics and predictability of extreme hydrometeorological events from the meteorological and hydrological point of view.																								
Director of the Course	Kerry Emanuel, MIT Massachusetts Institute of Technology																								
Name and type of organisation providing education and training	CNR (National Italian Research Council) and Laboratoire de Météorologie Dynamique, École Normale Supérieure (Paris)																								
Personal skills and competences																									
Mother tongue(s)	Italian																								
Other language(s)	English																								
Self-assessment <i>European level (*)</i>																									
English																									
	<table border="1"> <thead> <tr> <th colspan="2">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> </tr> </thead> <tbody> <tr> <td>C1</td> <td>Proficient user</td> <td>B2</td> <td>Independent user</td> <td>B2</td> <td>Independent user</td> <td>B2</td> <td>Independent user</td> </tr> </tbody> </table>	Understanding		Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production		C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user
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	(*) Common European Framework of Reference for Languages																								
Computer skills and competences	Operating Systems: good knowledge of Windows 98/2000/XP, Linux CAD: knowledge of AutoCAD. GIS: good knowledge of ArcGis 8.x / 9.x, MapInfo Numerical elaborations: excellent knowledge of MATLAB and Fortran Hydraulics elaborations: knowledge of Hec-RAS, MIKE 11																								
Driving licence	A - B Italian driving licence																								

- F. Silvestro, S. Gabellani, F. Giannoni, A. Parodi, N. Rebora, R. Rudari, and F. Siccardi, A hydrological analysis of the 4 November 2011 event in Genoa, *Nat. Hazards Earth Syst. Sci.*, 12, 2743-2752, 2012
- Boni, G.; Castelli, F.; Gabellani, S.; Machiavello, G.; Rudari, R.; , "Assimilation of MODIS snow cover and real time snow depth point data in a snow dynamic model," *Geoscience and Remote Sensing Symposium (IGARSS)*, 2010 IEEE International , vol., no., pp.1788-1791, 25-30, 2010.
- S. Gabellani, F. Silvestro, R. Rudari G. Boni. General calibration methodology for infiltration scheme in flash flood modeling. *Nat. Hazards Earth Syst. Sci.*, 8, 1317–1327, 2008.
- S. Gabellani, G. Boni, L. Ferraris, J. von Hardenberg and A. Provenzale. Propagation of uncertainty from rainfall to runoff: A case study with a stochastic rainfall generator. "Advances in Water Resources", 30 (10), 2061-2071, 2007.
- L. Ferraris, S. Gabellani, J. von Hardenberg, U. Parodi, A. Provenzale, N. Rebora. Revisiting multifractality in rainfall fields. "Journal of Hydrometeorology", 4, 544-551, 2003.
- L. Ferraris, S. Gabellani, N. Rebora, A. Provenzale. A comparison of stochastic models for spatial rainfall downscaling. "Water Resources Research", 39 (12), 1368, doi:10.1029/2003WR002504, 2003.
- S. Gabellani, F. Giannoni, A. Parodi, G. Roth, R. Rudari e A.C. Taramasso, Applicability of a forecasting chain at different morphological environments. *Advanced in Geoscience*, 2, 131-134, 2005.
- A.C. Taramasso, S. Gabellani, A. Parodi, An operational flash-flood forecasting chain applied to the test cases of the EU project Hydroptimet. *Natural Hazard and Earth System Sciences*, 5, 703-710, 2005.
- S. Segoni, L. Leoni, A. I. Benedetti, F. Catani, G. Righini, G. Falorni, S. Gabellani, R. Rudari, F. Silvestro, and N. Rebora, Towards a definition of a real-time forecasting network for rainfall induced shallow landslides, *Nat. Hazards Earth Syst. Sci.*, 9, 2119–2133, 2009.
- L. Ferraris, S. Gabellani, A. Provenzale, N. Rebora. Downscaling with multifractals: a performance test. *Proceedings of the III EGS Plinius Conference on Mediterranean Storms*, 267-272, October 2001.