Dichiarazione del Dott. Ing. Antonio Parodi ai fini del D.lgs n. 33/2013

Titolare di incarico di dirigenza

Dichiaro che:

1. Sono stato incaricato dal Consiglio di Amministrazione di Fondazione CIMA in data 01/01/2014.

2. L'incarico sopra ricordato prevede una durata indeterminata.

3. Il mio curriculum sintetico è disponibile nel sito di Fondazione CIMA http://www.cimafoundation.org/cima-foundation/antonio-parodi/ e qui sinteticamente riportato. Dottorato di ricerca in Ingegneria Idraulica e modellistica dei sistemi ambientali – Università degli Studi di Padova. Esperto nella modellazione atmosferica ed nella analisi statistica degli eventi estremi, nello sviluppo di modelli semplificati di convezione umida e secca e nello studio delle principali fonti di incertezza nella modellazione numerica ad alta risoluzione dei processi convettivi umidi. Vincitore di una borsa di studio CNR-MIT per l'anno 2002 nell'ambito della collaborazione italo-americana per lo studio del cambiamento climatico e delle catastrofi idrogeologiche. Coordinatore dei progetti FP7 DRIHMS (Distributed Research Infrastructure for Hydro-Meteorology Study, www.drihms.eu, 2009-2011) and DRIHM (Distributed Research Infrastructure for Hydro-Meteorology Study, www.drihms.eu, 2011-2015). Coordinatore dei progetti FP7 DRIHMS (Distributed Research Infrastructure for Hydro-Meteorology Study, www.drihms.eu, 2009-2011), DRIHM (Distributed Research Infrastructure for Hydro-Meteorology Study, www.drihms.eu, 2011-2015) e DRIHM2US (Distributed Research Infrastructure for Hydro-Meteorology Study to United States of America, www.drihm2us.eu, 2012-2014).Antonio Parodi è autore e coautore di 29 articolo su riviste internazionali con peer-review.

4. Per le attività nel Consiglio di Programmazione di Fondazione CIMA, per l'anno 2018 è stata determinata, con delibera del Consiglio di Amministrazione del 19.12.2017, una indennità di euro 5.000,00 lordi.

5. Non ricopro altri incarichi che prevedano compensi da parte di Fondazione CIMA.

6. Non ho riportato condanne penali, né -per quanto a mia conoscenza – ho carichi giudiziari pendenti.

Savona, 02.01.2018

Antonio Parodi

europass Curriculum vitae

PERSONAL INFORMATION

Antonio Parodi

Via Armando Magliotto 2, 17100 Savona (Italy)

+393489194083

antonio.parodi@cimafoundation.org

Sex Male | Date of birth 06/06/1974 | Nationality Italian

WORK EXPERIENCE

08/01/1999–31/03/2007 — Researcher

CIMA – Centro di ricerca Interuniversitario in Monitoraggio Ambientale (Interuniversity Research Centre for Environmental Monitoring), Savona (Italy)

01/04/2007–01/01/2014 — Project Leader

CIMA RESEARCH FOUNDATION, Savona (Italy)

01/01/2014–31/01/2017 — Research Director

CIMA RESEARCH FOUNDATION, Savona (Italy)

01/02/2017–Present — Program Director

CIMA RESEARCH FOUNDATION

EDUCATION AND TRAINING

01/09/1993–22/12/1998 — Master Degree in Environmental Engineering

University of Genoa, Genoa (Italy)

01/02/2000–01/02/2003 — PhD in Hydraulic Engineering and Environmental Systems Modelling

University of Padua, Padua (Italy)

PERSONAL SKILLS

Mother tongue(s): Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	C1	C2	C1	C1	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills: Exercised teaching and communication skills. Excellent ability of dealing with public talks and exposition.

Organisational / managerial skills

Great ability of relations with other people and of team building as well as a natural recognized leadership. Skills in managing large complex project: scheduling, human and financial resources, criticality analysis

Job-related skills

Key qualifications:

- More than 10 years of relevant experience in environmental engineering, early warning system with special focus on computational fluid dynamics and numerical weather prediction, e-Science (high-performance, grid and cloud computing) for hydro-meteorology modelling and data services at national and international level
- Responsible/coordinator of at least 5 projects implementing DRR applications, including e-Science (high-performance, grid and cloud computing, data) services for hydro-meteorology research and operational services
- About 50 peer reviewed scientific publications on severe hydrometeorological phenomena observation and modelling, e-Science solutions for hydro-meteorology research and operational services (see. Publications)
- Proven track of coordinating Training program at Academic and professional level (Bachelor and MS level at University Genova, at Ph.D. level at university of Genova and university of Pavia) and high specialization courses (courses for Civil protection managers) and thematic study tours on early warning systems and civil protection capacitiies.

Digital competence

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Independent user	Proficient user	Independent user	Proficient user

Digital competences - Self-assessment grid

Database: Advanced; Internet/Mail: Advanced; Presentation tools: Advanced; Spreadsheet: Advanced; Text processing: Advanced; Programming languages (Fortran, C, Matlab),Unix/linux

ADDITIONAL INFORMATION

Projects

2003-2007: P.I. of several research projects in the field severe hydro-meteorological events modeling predictions commissioned by the Italian Civil Protection Department

2009-2011: Project Coordinator of the EU FP7 funded Project (Distributed Research Infrastructure for Hydro-Meteorology Study, www.drihms.eu, DG-INFSO/DG-CONNECT, contract number 246703, 250 keuro)

2010-2012: Operational management services and technological innovations for the prediction of hydrogeological and forest fires risks- Research in the field of legal responsibilities of civil protection - Cooperation in civil protection in the countries that are the subject of interventions of the Department of civil Protection - Activity 2011-2012 (Convention No. 1112 of 10/8/2011

2010-2013: Project Leader of the Enhancing Resilience to Reduce Vulnerability in the Caribbean (CIMA, 1 Meuro). This initiative took an integrated approach to vulnerability reduction and enhancing resilience to climate change, natural hazards and poverty through enhanced civil protection, with regard to Barbados and the Organization of Eastern Caribbean States.

2011-2015: Project Coordinator of the EU FP7 funded Project (Distributed Research Infrastructure for Hydro-Meteorology, www.drihm.eu, DG-INFSO/DG-CONNECT, contract number 283568, 3.5 Meuro)

2012-2013: Support activities for the development and management of early warning systems, for purposes of civil protection and forest fire prevention in Bolivia, EWS Expert for the development of meteorological modeling system

2012-2015: Project Coordinator of the EU FP7 funded Project (Distributed Research Infrastructure for Hydro-Meteorology to US, www.drihm2us.eu, DG-INFSO/DG-CONNECT, contract number 313122, 0.5 Meuro)

© European Union, 2002-2017 | http://europass.cedefop.europa.eu

2012-2015: High Performance Computing GAUSS project "Extreme PREcipitation and Hydrological climate Scenario Simulations" (EXPRESS-Hydro, 42 Mcpu hours, https://www.lrz.de/services/compute/supermuc/magazinesbooks/2016_SuperMUC-Results-Reports.pdf, pages 230-231)

2017-2019: STEAM – SaTellite Earth observation for Atmospheric Modelling (ESA, Invitation to Tender AO/1-8963/17/NL/AF, 0.3 Meuro)

Publications

Fiori, E., Ferraris, L. , Molini, L., Siccardi, F., Kranzlmueller, D., and Parodi, A. (2017), Triggering and evolution of a deep convective system in the Mediterranean Sea: modelling and observations at a very fine scale, Quarterly Journal Of The Royal Meteorological Society.

Harpham, Q., Gimeno, O., Parodi, A., & D'Agostino, D. (2017). A stakeholder consultation into hydro-meteorological e-science environments. *Earth Science Informatics*, *10*(2), 219-234.

Lagasio, M., Parodi, A., Procopio, R., Rachidi, F., & Fiori, E. (2017). Lightning Potential Index performances in multimicrophysical cloud□resolving simulations of a back□building mesoscale convective system: The Genoa 2014 event. *Journal of Geophysical Research: Atmospheres*, *122*(8), 4238-4257.

Leong, S. H., Parodi, A., & Kranzlmüller, D. (2017). A robust reliable energy-aware urgent computing resource allocation for flash-flood ensemble forecasting on HPC infrastructures for decision support. *Future Generation Computer Systems*, *68*, 136-149.

Marras, I., Fiori, E., Rossi, L., & Parodi, A. (2017). Effects of the Representation of Convection on the Modelling of Hurricane Tomas (2010). *Advances in Meteorology*, vol. 2017, Article ID 1762137, 14 pages, 2017. doi:10.1155/2017/1762137.

Parodi, A., Kranzlmueller, D., Clematis, A., Danovaro, E., Galizia, A., Garrote, L., ... & Siccardi, F. (2017). DRIHM (2US): an e-Science environment for hydro-meteorological research on high impact weather events. *Bulletin of the American Meteorological Society*, (2017).

Poletti, M. L., Parodi, A. and Turato, B. (2017), Severe hydrometeorological events in Liguria region: calibration and validation of a meteorological indices-based forecasting operational tool. Met. Apps. doi:10.1002/met.1653

Parodi, A., Ferraris, L., Gallus, W., Maugeri, M., Molini, L., Siccardi, F., & Boni, G. (2017). Ensemble cloud-resolving modelling of a historic back-building mesoscale convective system over Liguria: the San Fruttuoso case of 1915. *Climate of the Past*, *13*(5), 455.

D'Agostino, D., Danovaro, E., Clematis, A., Roverelli, L., Zereik, G., Parodi, A., & Galizia, A. (2016). Lessons learned implementing a science gateway for hydro□meteorological research. *Concurrency and Computation: Practice and Experience*, *28*(7), 2014-2023.

Harpham, Q., Lhomme, J., Parodi, A., Fiori, E., Jagers, B., & Galizia, A. (2016). Using OpenMI and a Model MAP to Integrate WaterML2 and NetCDF Data Sources into Flood Modeling of Genoa, Italy. *JAWRA Journal of the American Water Resources Association*, *52*(4), 933-949.

Viterbo, F., von Hardenberg, J., Provenzale, A., Molini, L., Parodi, A., Sy, O. O., & Tanelli, S. (2016). High-Resolution Simulations of the 2010 Pakistan Flood Event: Sensitivity to Parameterizations and Initialization Time. *Journal of Hydrometeorology*, *17*(4), 1147-1167.

von Hardenberg, J., Parodi, A., Pieri, A. B., & Provenzale, A. (2015). Impact of Microphysics and Convective Parameterizations on Dynamical Downscaling for the European Domain. In *Engineering Geology for Society and Territory-Volume 1* (pp. 209-213). Springer International Publishing.

Hally, A., Caumont, O., Garrote, L., Richard, E., Weerts, A., Delogu, F., Fiori, E., Rebora, N., Parodi A, ... & Clematis, A (2015). Hydrometeorological multi-model ensemble simulations of the 4 November 2011 flash flood event in Genoa, Italy, in the framework of the DRIHM project. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 15, p. 537-555, ISSN: 1684-9981.

D'Agostino, D., Danovaro, E., Clematis, A., Roverelli, L., Zereik, G., Parodi A, & Galizia, A. (2015). Lessons learned implementing a science gateway for hydro□meteorological research. CONCURRENCY AND COMPUTATION, ISSN: 1532-0626

© European Union, 2002-2017 | http://europass.cedefop.europa.eu

Hally, A., Caumont, O., Garrote, L., Richard, E., Weerts, A., Delogu, F., Fiori, E., Rebora, N., Parodi A, ... & Clematis, A (2015). Hydrometeorological multi-model ensemble simulations of the 4 November 2011 flash flood event in Genoa, Italy, in the framework of the DRIHM project. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 15, p. 537-555, ISSN: 1684-9981

D'Agostino, D., Danovaro, E., Clematis, A., Roverelli, L., Zereik, G., Parodi A, & Galizia, A. (2015). Lessons learned implementing a science gateway for hydro□meteorological research. CONCURRENCY AND COMPUTATION, ISSN: 1532-0626

Quarati, A., Danovaro, E., Galizia, A., Clematis, A., D'Agostino, D., Parodi A (2015). Scheduling strategies for enabling meteorological simulation on hybrid clouds. JOURNAL OF APPLIED & COMPUTATIONAL MATHEMATICS, ISSN: 2168-9679

Alexandre B. Pieri, Jost von Hardenberg, Parodi A, and Antonello Provenzale (2015). Sensitivity of Precipitation Statistics to Resolution, Microphysics, and Convective Parameterization: A Case Study with the High-Resolution WRF Climate Model over Europe. JOURNAL OF HYDROMETEOROLOGY, vol. 16, p. 1857-1872, ISSN: 1525-755X

Fiori, E., Comellas, A., Molini, L., Rebora, N., Siccardi, F., Gochis, D. J., Parodi A (2014). Analysis and hindcast simulations of an extreme rainfall event in the Mediterranean area. ATMOSPHERIC RESEARCH, vol. 138, p. 13-29, ISSN: 0169-8095, doi: doi:10.1016/j.atmosres.2013.10.007

Rebora, N., Molini, L., Casella, E., Comellas, A., Fiori, E., Pignone, F., Parodi A (2013). Extreme rainfall in the mediterranean: what can we learn from observations?. JOURNAL OF HYDROMETEOROLOGY, vol. 14, p. 906-922, ISSN: 1525-755X

J. G. Pinto, S. Ulbrich, A. Parodi, R. Rudari, G. Boni, U. Ulbrich (2013). Identification and ranking of extraordinary rainfall events over Northwest Italy: The role of Atlantic moisture. JOURNAL OF GEOPHYSICAL RESEARCH, vol. 118, p. 2085-2097, ISSN: 0148-0227, doi: 10.1002/jgrd.50179

Silvestro, F., S. Gabellani, F. Giannoni, Parodi A, N. Rebora, R. Rudari, A. Cavallo, and F. Siccardi (2012). A Hydrological Analysis of the 4th November 2011 event in Genoa. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, ISSN: 1684-9981

Bedrina, T., Parodi A, A. Quarati, A. Clematis (2012). ICT approaches to integrating institutional and non-institutional data services for better understanding of hydro-meteorological phenomena. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, ISSN: 1684-9981

Comellas, A., Parodi A, Z. Fuchs, L. Molini (2012). Saturation fraction and gross moist stability in severely precipitating systems in the midlatitude Mediterranean environment. ATMOSPHERIC RESEARCH, ISSN: 0169-8095

A. Parodi, G. Boni, L. Ferraris, F. Siccardi, P. Pagliara, E. Trovatore, E. Foufoula-Georgiou, D. Krantzmueller (2012). The "Perfect Storm": From Across the Atlantic to the Hills of Genoa. EOS, vol. 93 n. 24, p. 225-226, ISSN:

Molini, L., Parodi A, N. Rebora, G. C. Craig (2011). Classifying severe rainfall events over Italy by hydrometeorological and dynamical criteria. QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY, vol. 137, p. 148-154, ISSN: 0035-9009

Comellas, A., L. Molini, Parodi A, A. Sairouni, M. C. Llasat, and F. Siccardi (2011). Predictive ability of severe rainfall events over Catalonia for year 2008. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 11, p. 1813-1827, ISSN: 1684-9981

Parodi A, E. Foufoula-Georgiou E., K. A. Emanuel (2011). Signature of microphysics on spatial rainfall statistics. JOURNAL OF GEOPHYSICAL RESEARCH. ATMOSPHERES, ISSN: 0148-0227, doi: doi:10.1029/2010JD015124

Schiffers, M., Parodi A, et al (2011). Towards a Grid Infrastructure for Hydro-Meteorological Research. COMPUTER SCIENCE, vol. 12, p. 45-62, ISSN: 1508-2806

Parodi A, and S. Tanelli (2010). Influence of turbulence parameterization on high resolution numerical modeling of observed tropical convection during NASA TC4 field campaign. JOURNAL OF GEOPHYSICAL RESEARCH. ATMOSPHERES, vol. 115, ISSN: 0148-0227, doi: 10.1029/2009JD013302

Fiori, E., Parodi A, and F. Siccardi (2010). Joint effects of turbulent parameterizations, microphysics and grid spacing on the high resolution modeling of deep moist convective processes. ATMOSPHERIC RESEARCH, ISSN: 0169-8095

Fiori, E., Parodi A, and F. Siccardi (2010). Turbulence closure parameterization and grid spacing effects in simulated supercell storms. JOURNAL OF THE ATMOSPHERIC SCIENCES, ISSN: 0022-4928

Parodi A, and K. A. Emanuel (2009). A Theory for Buoyancy and Velocity Scales in Deep Moist Convection. JOURNAL OF THE ATMOSPHERIC SCIENCES, vol. 66, p. 3449-3463, ISSN: 0022-4928

Molini, L., Parodi A, and F. Siccardi (2009). Dealing with uncertainty: an analysis of the severe weather events over Italy in 2006. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 9, p. 1-13, ISSN: 1684-9981

Fiori, E., Parodi A, F. Siccardi (2009). Dealing with uncertainty: turbulent parameterizations and grid-spacing effects in numerical modelling of deep moist convective processes. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 9, p. 1871-1880, ISSN: 1684-9981

Boni, G., Parodi A, and F. Siccardi (2008). A new parsimonious methodology of mapping the spatial variability of annual maximum rainfall in mountainous environments. JOURNAL OF HYDROMETEOROLOGY, vol. 9, p. 492-506, ISSN: 1525-755X

Molini, L., Parodi A, and F. Siccardi (2008). An observing system simulation experiment for the study on attenuation on C-band radar measurements. METEOROLOGICAL APPLICATIONS, vol. 15, p. 523-533, ISSN: 1350-4827

von Hardenberg, J., Parodi A, G. Passoni, A. Provenzale, and E. Spiegel (2008). Large-scale patterns in Rayleigh-Bénard convection. PHYSICS LETTERS A, vol. 372, p. 2223-2229, ISSN: 0375-9601

Milelli, M., E. Oberto, Parodi A (2008). Sensitivity experiments of a severe rainfall event in north-western Italy: 17 August 2006. ADVANCES IN SCIENCE AND RESEARCH, vol. 2, p. 133-138, ISSN: 1992-0628

Molini, L., Parodi A, N. Rebora, and F. Siccardi (2006). Assessing uncertainty in radar measurements on simplified meteorological scenarios. ADVANCES IN GEOSCIENCES, vol. 7, p. 141-146, ISSN: 1680-7359

G. BONI, A. PARODI, R. RUDARI (2006). Extreme rainfall events: learning from rain gauge time series. JOURNAL OF HYDROLOGY, vol. 327, p. 304-314, ISSN: 0022-1694

Taramasso, A.C., S. Gabellani, Parodi A (2005). An operational flash-flood forecasting chain applied to the test cases of the EU project HYDROPTIMET. NATURAL HAZARDS AND EARTH SYSTEM SCIENCES, vol. 5, p. 703-710, ISSN: 1684-9981

Gabellani, S., F. Giannoni, Parodi A, R. Rudari, A.C. Taramasso, and G. Roth (2005). Applicability of a forecasting chain in a different morphological environment in Italy. ADVANCES IN GEOSCIENCES, vol. 2, p. 1-4, ISSN: 1680-7359

Parodi A (2005). Dynamics of intense convective rain cells. ADVANCES IN GEOSCIENCES, vol. 2, p. 1-6, ISSN: 1680-7359

Parodi A, J. von Hardenberg, G. Passoni, A. Provenzale, and E. A. Spiegel (2004). Clustering of plumes in turbulent convection. PHYSICAL REVIEW LETTERS, vol. 92, ISSN: 0031-9007

Parodi A, K. A. Emanuel, and A. Provenzale (2003). Plume patterns in radiative–convective flows. NEW JOURNAL OF PHYSICS, vol. 5, p. 106.1-106.17, ISSN: 1367-2630

A. Parodi, G. Boni (2001). Phenomenological validation of a regional rainfall frequency analysis. PHYSICS AND CHEMISTRY OF THE EARTH. PART B: HYDROLOGY, OCEANS AND ATMOSPHERE, vol. 26(9), p. 649-654, ISSN: 1464-1909