

PERSONAL INFORMATION Mario Lloyd Virgilio MARTINA

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WORK EXPERIENCE

Academic roles	2021 – now 2017 – 2021 2014 – 2017 2010 – 2012	Full Professor in Hydrology at IUSS Pavia Associate Professor in Hydrology at IUSS Pavia Researcher in Hydrology at IUSS Pavia Research Fellow in Flood Risk Modelling at University of Bologna
Research projects (Selection of the most recent)	2023 – now 2022 – now 2019 – 2021 2019 – 2021 2017 – 2018 2020 – 2026 2020 – 2023 2020 – 2021 2022 – 2024	PI of “Risk-based design of Infrastructures” (6.7 Mln €), funded by Ministry of University and Research Dipartimenti di Eccellenza Unit leader of “MEDIATE - Multi-hazard and risk informed system for Enhanced local and regional Disaster risk management” (250 k€) funded by EU Commission, Horizon Europe PI of “SMART - A Statistical, Machine Learning Framework for Parametric Risk Transfer” (200 k€) funded by World Bank and UK Department of International Development Unit leader of “NOCTUA Landscape monitoring. For Everyone. From space” (900 k€) funded by Regione Lombardia PI of “Risk Appetite Index based on Machine Learning Techniques, RATIONAL” funded by the Allianz Global Corporate Solution, Munich (D) Coordinator of the Project “PhD in Sustainable Development and Climate change (PhD-SDC)” (20.5 Mln€) funded by the Minister of University and Research and 52 Italian Universities PI of the Project “IUSS Data Center High Performance Computer” (3.4 Mln€) funded by the Regione Lombardia PI of “Climate change impact in economy”, funded by IRPET – Istituto Regionale per la Programmazione Economica della Toscana WP leader of “Multi-hazard and Risk-informed system for Enhanced Local and Regional Disaster risk management”, Horizon-EU
Academic appointments	2021 – now 2021 – now 2021 – now 2014 – now 2018 – 2023 2018 – 2023 2017 – 2018	Coordinator of Inter-University PhD Course in Sustainable Development and Climate Change Prorector for the International Relationships, IUSS Pavia Director of the IUSS Data Center of High Performance Computing Member of the Scientific Board of the PhD in Understanding and Managing the Risk Head of the Department of Science, Technology and Society, IUSS Member of the Academic Senate, IUSS Head of the Research Center on Uncertainty and Risk Assessment
Prizes	2018	Honorary Associate Professor at Department of Mathematics at the University of Exeter

EDUCATION AND TRAINING

2000 – 2004 PhD in Natural hazard risk assessment, University of Bologna
1999 – 2000 MSc in Risk Engineering and Loss Adjustment, CINEAS - Politecnico di Milano
1995 – 2000 MSc in Civil Environmental Engineering, University of Bologna

PERSONAL SKILLS

Mother tongue(s) Italian
 Other language(s) English (C2)

PUBLICATIONS

(Selection of 1 most recent publications)

- 1) Cesarini, L., Gonçalves, R., Martina, M., Romão, X., Monteleone, B., Pereira, F. L., & Figueiredo, R.. Comparison of deep learning models for milk production forecasting at national scale. *Computers and Electronics in Agriculture*, 221, 2024
- 2) Figueiredo, R., Rangel-Parra, R., Bussi, G., Ceresa, P., Coccia, G., & Martina, M. L. V.. A semi-quantitative multi-hazard risk assessment framework for European coastal urban areas. *Geomatics, Natural Hazards and Risk*, 15(1), 2024
- 3) Monteleone, B., Borzi, I., Arosio, M., Cesarini, L., Bonaccorso, B., & Martina, M., Modelling the response of wheat yield to stage-specific water stress in the Po Plain. *Agricultural Water Management*, 287, 108444, 2023
- 4) Monteleone, B., Giusti, R., Magnini, A., Arosio, M., Domeneghetti, A., Borzi, I., Martina, M. L., Estimations of Crop Losses Due to Flood Using Multiple Sources of Information and Models: The Case Study of the Panaro River. *Water*, 15(11), 1980, 2023
- 5) Monteleone, B., Borzi, I., Bonaccorso, B., Martina M., Quantifying crop vulnerability to weather-related extreme events and climate change through vulnerability curves. *Nat Hazards* 116, 2761-2796, 2023
- 6) Bateni, M.M., Martina, M.L.V. & Arosio, Multivariate return period for different types of flooding in city of Monza, Italy. *Nat Hazards* 114, 811-823, 2022
- 7) Monteleone B, Borzi, Bonaccorso B, Martina M., Developing stage-specific drought vulnerability curves for maize: the case study of the Po River basin., *Agric Water Manage* 269(107):713, 2022
- 8) Cesarini, L., Figueiredo, R., Romão, X., Martina, M., Exposure modelling of transmission towers using street-level imagery and a deep learning object detection model. In *Proceedings of the International Conference on Natural Hazards and Infrastructure*, 2022
- 9) Arosio, M., Cesarini, L., & Martina, M. L., Assessment of the Disaster Resilience of Complex Systems: The Case of the Flood Resilience of a Densely Populated City. *Water*, 13(20), 2830, 2021
- 10) Arosio, M., Arrighi, C., Cesarini, L., & Martina, M. L. V., Service accessibility risk (SAR) assessment for pluvial and fluvial floods in an urban context. *Hydrology*, 8(3), 142, 2021
- 11) Cesarini, L., Figueiredo, R., Monteleone, B., Martina, M.L.V., The potential of machine learning for weather index insurance. *Natural Hazards And Earth System Sciences*, vol. 21, p. 2379-2405, ISSN: 1684-9981, doi: 10.5194/nhess-21-2379-2021, 2021
- 12) Vecere, A., Martina, M.L.V., Monteiro, R., Galasso, C., Satellite precipitation-based extreme event detection for flood index insurance. *International Journal of Disaster Risk Reduction*, vol. 55, ISSN: 2212-4209, doi: 10.1016/j.ijdr.2021.102108, 2021

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 Google SCHOLAR: Documents/Citations/h-index = 212/1809/20
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