STEFANELLI – CURRICULUM VITAE

PERSONAL INFORMATION	
Last Name	STEFANELLI
First Name	MARCO
Date of birth	11/02/1990
Nationality(ies)	ITALIAN
Address	VIA ISTRIA, 48
City	VEGLIE (LECCE)
Country	ITALY
Personal Email	marko.stefanelli@gmail.com

LANGUAGES & OTHER SKILLS		
Languages	Native language(s):	ITALIAN
	Other Languages:	English, fluent Croatian, beginner
Computer Skills	Programming Languages:	Python, advanced Fortran, advanced Linux/Unix, advanced Latex, advanced
	NetCDF libraries:	NCO, CDO, NCAP (advanced)
	HPC:	SLURM, PBS, LSF (advanced)
	Informatic tools:	Jupyter, Github

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EDUCATION	
Start & End date	Degree (highest degree first*)*
01/11/2019 - 31/01/2023	PhD in FUTURE EARTH, CLIMATE CHANGE AND SOCIETAL CHALLENGES, University of Bologna, Italy (Inter-disciplinary programs involving natural sciences, mathematics and statistics, Physics, Earth sciences, Data Science, Machine Learning and Climate Science) Dissertation title: Data assimilation for advanced cross-scale unstructured-grid ocean modeling, Supervisor: Dr. Ivan Federico, Co-supervisors: Dr. Eric Jansen, Dr. Ali Aydogdu and Prof. Nadia Pinardi.
01/09/2014 - 19/03/2018	MASTER'S DEGREE in EARTH SYSTEM PHYSICS, University of Trieste, Italy Dissertation title: A study of urbanization effects on the West-Africa monsoon, Supervisor: Prof. Filippo Giorgi
28/10/2009 - 12/12/2013	BACHELOR GRADUATION in PHYSICS, University of Salento, Italy Dissertation title: Mean Sea Level: processes, observations and its course in the Mediterranean Sea, Supervisor: Prof. Piero Lionello

PROFESSIONAL EXPERIENCE	
Start & End date	Job position and description
03/04/2024 - CURRENT	SMASH postdoctoral researcher at the Faculty of Mathematics and Physics (FMF) at the University of Ljubljana (Slovenia). My research involves Data assimilation, Artificial Intelligence and Weather Forecast. The main goal is to improve the forecast of severe precipitation events using weather radar data (read the abstract).
01/02/2023- 01/03/2024	RESEARCHER, Euro-Mediterranean Centre on Climate Change (CMCC), Italy Finalize the papers based on the PhD results, continue the research in collaboration with Imperial College, improve the work done during the PhD and build products to validate ocean models output against observations.
03/04/2018- 16/04/2019	RESEARCHER, The Abdus Salam International Centre for Theoretical Physics (ICTP), Italy Research on the urbanization effects on the West Africa Monsoon, supervised by Prof. Filippo Giorgi in the Earth System Physics research group.

TEACHING EXPERIENCE		
Organisation	Period	Course, level & subject
ISIS Leonardo Da Vinci, Italy	12/04/2018-14/06/2018	Secondary school head teacher in computer and energetic science

Awards, grants & fellowships
• Puglia Region Youth Fund (PIN) Ref. 2192. • Second place at Sergio Borghi award – Fondazione Osservatorio Meteorologico Milano Duomo https://www.youtube.com/watch?v=R5q-pwXo9dY&t=7s
Academic co-operations
• Imperial College London in the Data Science group
Non-academic co-operations
• Euro-Mediterranean Centre on Climate Change
Management of research
• The topic for the research at Imperial College London was ideated and organized by me, under the approval of the University of Bologna PhD committee.
Administrative duties
• Manage the PhD administration (e.g. manage the funds for the Imperial College abroad period, funds dedicated to the participation at conferences and schools)

Conference presentations
• 27/09/2022 - 28/09/2022: Interreg Italia-Croatia, Ocean modeling workshop and infoday https://programming14-20.italy-croatia.eu/web/stream/-/ocean-modelling-workshop-in-venice • 23/05/2022 - 27/05/2022: EGU (European Geoscience Union) https://meetingorganizer.copernicus.org/EGU22/EGU22-4741.html
Citizen science / outreach
The project presented to the Puglia Region Youth Fund (PIN) listed in the Awards, grants & fellowships section was based on citizen science and outreach about the problems related to climate change. The project's basis was raising awareness among citizens about air quality with the final goal of focusing on the climate change issue. Furthermore, the project included some workshops on how to build air quality sensors to monitor particulate matter (10 and 2.5). To introduce citizens to and disseminate the project, I held an online seminar (it was covid period) discussing the project's purpose, air quality, and climate change issues. I also ideated and conducted a podcast about climate change for a local (Lecce, Apulia, Italy) web radio. The podcast consisted of five episodes in which I talked about various aspects of atmospheric modelling, differences between weather models and climate models, and how to mitigate climate change effects changing everyday habits.