

PERSONAL INFORMATION

Marianna BENASSI



marianna.benassi@cmcc.it

Gender Female | Date of birth 02/02/1987 | Nationality Italian

WORK EXPERIENCE

December 2016 - now

PostDoc fellow

Fondazione CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici) Climate Simulation and Prediction (CSP) division

My present area of interest is the study of climate variability over the Euro-Mediterranean region. My research is focused on two main aspects: investigating possible sources of predictability at the seasonal-to-interannaual time scale, and studying possible drivers of climate variability on the decadal time scale. I am currently collaborating on different research projects and climate service activities in which CSP division is involved.

Business or sector: Research Institute

February - August 2013

Internship

CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici)

In the period at CMCC before entering in my PhD programme I had the chance to acquire and improve the skills necessary for the study of atmosphere and climate variability. In particular I have gained experience in performing climate simulations, in the post processing of the simulation outputs, and in data analysis.

Business or sector: Research Institute

EDUCATION and TRAINING

September 2013 – February 2017

PhD in Science and Management of Climate Change

Ca' Foscari University of Venice and CMCC (Centro Euro-Mediterraneo sui Cambiamenti Climatici)

My PhD activity has been carried on at CMCC under the supervision of Dr Antonio Navarra. The aim of my project has been to study the dynamic effects on the atmosphere of temporal and spatial variations of carbon dioxide concentration.

The title of my final dissertation is *Defining the time and spatial scale of climate response to* CO_2 *changes*, which led to the doctorate being awarded with honours.

a.y. 2009/2010 - 2011/2012

Master's degree in Physics

Alma Mater Studiorum - University of Bologna

After my BSc I enrolled in a two-year Master degree in Physics at University of Bologna (stream in Solid Earth Physics). The modules I attended focused on a large variety of subjects in Geophysics (e.g. seismology, geodesy, geodynamics) with both a theoretical and applied approach.

The title of my final dissertation is *Temperature and CO*₂ *relations in ensemble climate change scenarios*, and this work was developed under the supervision of Prof Enzo Boschi and Dr Antonio Navarra.

I graduated with the maximum grade (110/110) cum laude.





a.y. 2005/2006 - 2008/2009

Bachelor's degree in Physics

Alma Mater Studiorum - University of Bologna

I took my Bachelor's degree in Physics at University of Bologna. The aim of the programme I enrolled in is to provide a strong background in Mathematics (algebra, calculus, and statistics) and Physics (classical and modern physics from both a theoretical and applied perspectives). I attended optional classes to improve my knowledge in Geophysics. I have worked for my final project in Physics of Volcanism with Prof Maurizio Bonafede studying an analytical model of deformation source in an idealised isotropic and homogeneous medium.

I graduated with the maximum grade (110/110) cum laude.

a.y. 2000/2001 - 2004/2005

High School Diploma

Liceo Ginnasio Luigi Galvani, Bologna

I attended an high school programme providing a strong background on humanities (e.g. ancient greek and latin language and literature, philosophy, art history), but with an extra focus on scientific subjects (mathematics and physics).

My final examination was evaluated with the maximum grade (100/100).

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

English

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

Organisational / managerial skills

Good problem solving attitude and mediation skills put into practice as elected student representative in the board of the PhD programme in Science and Management of Climate Change, University of Venice (a.y. 2013/2014 – 2015/2016).

Technical Skills

Programming Languages and Software:

C/C++ (beginner)
Python (intermediate)
Shell (intermediate)
Fortran (intermediate)

MatLab (intermediate)

LaTeX (advanced)

Software for climate data analysis: CDO, NCL, NCO, GrADs

Operating System: Unix, Windows

Experience with climate simulations in parallel environment

(e.g. CESM - Community Earth System Model)

Driving licence

В



SCIENTIFIC CONTRIBUTIONS

Benassi M and Navarra A, "The Respone of the Atmosphere to Local CO₂ Changes". Poster at **SISC Annual Conference 2017** (Bologna - Italy, October 2017)

Benassi M and Navarra A, "The Response of the Atmosphere to Local CO₂ Changes" (update). Poster at **EGU Annual Meeting** (*Wien - Austria, April 2018*)

Benassi M and Navarra A (2018), "The Respone of the Atmosphere to Local CO₂ Changes", *in prep*.

Benassi M, Materia S, Ruggieri P, and Gualdi S (2018), "ENSO teleconnections over the Euro-Mediterranean region: the role of PDO modulation". *Oral presentation at the* **European Meteorological Society Annual Meeting** (Budapest - Hungary, September 2018)

Benassi M, Materia S, Ruggieri P, and Gualdi S (2018), "ENSO teleconnections over the Euro-Mediterranean region: the role of PDO modulation". *Oral presentation at the* **MEDCLIVAR 2018 Conference** (*Belgrade - Serbia*, *September 2018*)

Benassi M, Materia S, Ruggieri P, and Gualdi S (2018), "Remote sources of predictability for the Mediterranean climate". *Oral presentation at the* **SISC Annual Conference 2018** (*Venice - Italy, October 2018*)

Benassi M, Materia S, Ruggieri P, and Gualdi S (2019), "ENSO teleconnections over the Euro-Mediterranean region: the role of extratropical PDO modulation". Oral presentation at the **EGU Annual Meeting** (Wien - Austria, April 2019)

Materia S, Benassi M, Ardilouze C, Peano D, Ruggieri P, and Gualdi S (2019), "Atmosphere response to heat waves hitting wet and dry soils in the Mediterranean region". *Oral presentation at the* **EGU Annual Meeting** (*Wien - Austria, April 2019*)

Ruggieri P, Materia S, Benassi M, and Gualdi S (2018), "The sensitivity of Mediterranean winter to Siberian snow cover variability". Poster at the **European Meteorological Society Annual Meeting** (*Budapest - Hungary*, *September 2018*)

Ruggieri P, Materia S, Benassi M, and Gualdi S (2018), "The sensitivity of Mediterranean winter to Siberian snow cover variability". *Poster at the* **MEDCLIVAR 2018 Conference** (*Belgrade - Serbia*, *September 2018*)



ADDITIONAL INFORMATION

In May 2018 I have participated to the CDS training session at ECMWF (Reading, UK)

In February 2017 I have participated to the course *Introduction to Parallel Computing* at CINECA (Bologna)

From September to December 2015, I spent a three month **visiting period** at NCAR (**National Center for Atmospheric Research** – Boulder, Colorado), where I have worked under the supervision of Dr Joe Tribbia.

In August 2014, I was selected and I participated to the **CESM Tutorial 2014** at NCAR (National Center for Atmospheric Research – Boulder, Colorado).

In April 2013 I took the GRE - Graduate Record Examination

April, 11th 2019 Marianna Benassi