



# Roberta Benincasa

**Date of birth:** 07/08/1999 | **Nationality:** Italian | **Phone number:** (+39) 370570860 (Mobile) |

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## WORK EXPERIENCE

01/08/2023 – 31/10/2023 Bologna, Italy

**SCHOLARSHIP FOR POSTGRADUATE RESEARCH ACTIVITIES** DEPARTMENT OF PHYSICS AND ASTRONOMY "AUGUSTO RIGHI", UNIVERSITY OF BOLOGNA

## EDUCATION AND TRAINING

01/10/2017 – 19/10/2020 Trieste, Italy

**BACHELOR DEGREE IN PHYSICS** University of Trieste

During my bachelor's degree I acquired:

- training in mathematics, physics, and statistics, both applied and theoretical;
- intermediate programming skills in Fortran;
- problem-solving and collaboration skills.

During the curricular internship, I had the opportunity to work on a climate model for exoplanets at the Astronomical Observatory of Trieste.

In my bachelor thesis, I performed climate data analysis in the European region with Dr. Filippo Giorgi as supervisor at the International Centre for Theoretical Physics (ICTP), Trieste.

**Website** <https://df.units.it/> | **Final grade** 110/110 cum laude |

**Thesis** Analysis of climate trends of temperature and precipitation in the European region

01/10/2020 – 16/03/2023 Bologna, Italy

**MASTER DEGREE IN PHYSICS OF THE EARTH SYSTEM** Alma Mater Studiorum - University of Bologna

During my master's degree I acquired:

- advanced theoretical knowledge in physical oceanography, physics of complex systems, climatology, and meteorology;
- theoretical knowledge in data assimilation;
- numerical methods skills for simulations of physical systems and PDEs solutions;
- programming skills in Python;

My master thesis, supervised by Prof. Nadia Pinardi (University of Bologna) and co-supervised by Dr. Giovanni Liguori (University of Bologna) and Prof. Hans von Storch (Helmholtz - Zentrum Hereon, Hamburg), focused on the study of the internal ocean variability of the Mediterranean Sea through the application of stochastic climate model theory.

**Website** <https://corsi.unibo.it/magistrale/FisicaSistemaTerra> | **Final grade** 110/110 cum laude |

**Thesis** Ocean climate predictability study in the Mediterranean Sea

01/11/2023 – CURRENT Bologna, Italy

**PHD STUDENT** Alma Mater Studiorum - University of Bologna

*Research topics:* ocean predictability, ocean variability, mesoscale turbulence, internal variability.

*Supervisor:* Prof. Nadia Pinardi (University of Bologna), Prof. Jeffrey B. Weiss (University of Colorado, Boulder)

**Website** <https://phd.unibo.it/future-earth-climate-change-societal-challenges/en>

## LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C2	C2	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

## DIGITAL SKILLS

Programming: Python, Fortran

LateX programming for academic papers

Version control with GitHub

## HONOURS AND AWARDS

30/06/2023

**2nd Place of the Outstanding Young Scientist Award in the Graduate/Undergraduate's Oral Presentation category - 13th International Workshop on Modeling the Ocean (IWMO)**

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## PUBLICATIONS

2024

**[Internal and forced ocean variability in the Mediterranean Sea](#)**

Benincasa, R., Liguori, G., Pinardi, N., and von Storch, H., Ocean Sci., 20, 1003–1012, 2024

## CONFERENCES AND SEMINARS

02/09/2024 – 06/09/2024 Les Houches School of Physics, Les Houches, France

**Physics of Wave Turbulence and Beyond**

Poster presentation

27/06/2023 – 30/06/2023 Helmholtz-Zentrum Hereon, Hamburg, Germany

**13th International Workshop on Modeling the Ocean (IWMO)**

Oral presentation