CONTACT

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Personal website - ENEA - BAS

ENEA,

Centro Ricerche Casaccia, Via Anguillarese, 301 00123 Rome

Italy

SOCIAL

in R^G

Maria Vittoria Guarino

Feb 2025 - present

Sep 2022- Feb 2025

Sep 2020- Sep 2022

October 2016

CURRICULUM VITAE

RESEARCH & WORK EXPERIENCE

Research Scientist

ENEA

Climate Modelling Division

SSPT-CLIMAR

Rome (IT)

Research Fellow

International Centre for

Theoretical Physics,

Earth System Physics,

Trieste (IT)

Research Fellow

University of Leeds,

Faculty of Engineering & Physical

Sciences,

Leeds (UK)

Earth System Modeler Sep 2017- Sep 2020

(PDRA)

British Antarctic Survey (BAS),

Cambridge (UK)

Department of Meteorology

University of Reading, Reading (UK)

Visiting Researcher

NCAR - Aviation Applications Program

Boulder (CO)

Research Intern Summer 2013

Atmospheric Modelling group

CIEMAT, Madrid (ES)

Research Intern Summer 2011

Applied Geophysics Lab

Università del Salento, Lecce (IT)

EDUCATION

PhD in Atmosphere, Oceans and Climate

2014-2017

2011-2013

2008-2011

University of Reading, Reading (UK)

Thesis: Mountain wave breaking in atmospheric flows with directional wind shear

Supervisors: Dr. Miguel Teixeira, Prof Maarten Ambaum Examiners: Prof Paul Williams (UoR) and Dr. Andreas Dörnbrack (DLR, DE)

MSc in Environmental Science (cum laude and honorable mention)

Università del Salento, Lecce (IT)

Thesis: Simulations of urban heat island in the city of

Lecce using the WRF model.

Supervisors: Dr Silvana di Sabatino (UoS), Dr Alberto

Martilli (CIEMAT, ES)

BSc in Environmental Science (cum laude and honorable mention)

Università del Salento, Lecce (IT)

Thesis: Seismic characterization of some areas of Salento

using Vs30.

Supervisors: Prof Sergio Negri, Prof Tatiana Quarta,

Dr. Stefano Margiotta

RECOGNITIONS & AWARDS

Honorary Research Fellow at the British Antarctic Survey – title awarded to scientists who have attained considerable distinction in science and have a continuing close association with BAS. From September 2020 onwards.

TEACHING and SUPERVISING

- 2023-2024 Data Analysis course as part of the ICTP Postgraduate Diploma Programme in Earth System Physics. Part of the 'Numerical Methods and Data Analysis in Geosciences' course.
- 2021-2022 Supervisor of Master of Chemistry student Grace Dunleavy (University of Leeds) on the research project: "A database of noctilucent clouds observations for climate model validation".
- 2020-2021 Co-supervisor of Rachel Diamond (physics student at Imperial College, London) on a research internship at BAS working on melt ponds and sea ice during Last Interglacial Period.
- 2019: Supervisor of the GW4+DTP research project "Understanding a changing world: studying the decline of Antarctic sea ice", student: Jack Arnatt, BAS.
- 2018: Supervisor of the SPITFIRE DTP research project "Our Heritage and Future: Retreat of Antarctic sea ice", student: Andrea Becsek, BAS.
- 2018 2022: Co-supervisor of PhD Project "Reconstructions of Antarctic seaice at the peak of the last interglacial", student: Matthew Chadwick, BAS.
- 2016-2017: Teaching assistant for the MSc course "Numerical modelling of Atmosphere and Oceans". University of Reading, Department of Meteorology.

OTHER ROLES and QUALIFICATIONS

- National Scientific Qualification for Associate Professor in GEOPHYSICS and EARTH and PLANETARY PHYSICS / Abilitazione Scientifica Nazionale Professore Associato GEOFISICA (04/A4) e FISICA DELLA TERRA E DEI PIANETI (02/C1).
- 2020, 2024, 2025: Co-convener of the EGU General Assembly "Mountain Weather and Climate" session, Vienna (AU).
- 2024: Instructor for the ICTP NORP-SORP Summer School and Workshop on Polar Climates, 22-31 July, Trieste (IT).
- 2020: Contributing author to the Coupled Model Intercomparison Project (CMIP6) multi-model ensemble.
- 2018: Organizer of the Cambridge Centre for Climate Sceince (CCfCS) Numerical Modelling Workshop.
- 2016: Organizer of the University of Reading PhD visiting scientist week. 2016 visiting scientist: Richard Rotunno, NCAR, Boulder (CO).