

# CURRICULUM VITAE



Latest update

September 1, 2020

## PERSONAL INFORMATION

**First name and Surname**

Giorgia Verri

**Nationality**

Italian

**Birth date**

15 March 1983 Galatina (LE)

**Office**

CMCC Foundation - Euro-Mediterranean Center on Climate Change  
OPA-Ocean Predictions and Applications Division  
Via A. Imperatore 16, Lecce - IT

**E-mail**

giorgia.verri@cmcc.it

## CURRENT POSITION

• *Dates (from– to)*

2 May 2012 – Present

• *Company*

**C.M.C.C.** (Euro-Mediterranean Center on Climate Change)

• *Division*

OPA (Ocean Prediction and Applications)

• *Job Title/ Contract*

Junior Scientist- Permanent contract

## **Research Activities and Responsibilities**

**Develop and implement an Estuarine Box Model, the CMCC EBM, to properly represent the net river release into mesoscale ocean models and to get estimate of the salt wedge intrusion**

**Improve the numerical and physical capabilities of an unstructured-grid finite-element model based on SHYFEM code. Specific focus on the vertical discretization of the water column through time dependent vertical coordinate system**

**Model the regional-to-coastal scale ocean by means of structured and unstructured grid approaches in order to reproduce the complex morphology and thermo-hydrodynamics of the shelf areas while resolving large-scale processes**

**Coupling/seamless modeling of inland and marine waters working with finite difference/finite elements numerical codes**

## PREVIOUS WORK EXPERIENCES

• *Dates (from– to)*

11 October 2011 – 30 April 2012

• *Company*

**GSE S.p.A.**

• *Division*

Direzione Gestione Energia. Unità Previsioni e Ottimizzazioni

• *Contract*

Permanent contract

• *Main Activities and Responsibilities*

Implementation, development and validation of an **Operational System for wind energy and solar energy prediction**

**Support to Technical Committee CT88 di IEC**

**Wind farm Surveys**

• *Dates (from– to)*

2 April 2011-10 October 2011

• *Company*

**GSE S.p.A**

• *Division*

Direzione Gestione Energia. Unità Previsioni e Ottimizzazioni

• *Contract*

Stage

- *Main Activities and Responsibilities* Implementation, development and validation of an **integrated modeling system for wind energy forecasting**
- *Dates (from– to)* 1 September 2010- 31 March 2011
- *Company* **ENEL** –Brindisi
- *Division* Enel Research Unit –Engineering and Innovation Division
- *Contract* Stage
- *Main Activities and Responsibilities* Research activities in meteorological modeling and development of integrated modeling system for **wind energy forecasting** and **pollutant dispersion**  
Integrated modeling chain applied to EnelGreenPower wind farm: mesoscale meteorological prognostic model MM5 + microscale diagnostic WindSim

## ABROAD PROFESSIONAL EXPERIENCES

- *Dates (from– to)* 1 September 2014- 1 March 2015
- *Main Activities and Responsibilities* Implementation and upgrade of a modeling chain for the coastal water cycle including atmosphere (WRF), hydrology (WRF-Hydro), estuarine dynamics (CMCC EBM) and marine thermo-hydrodynamics (NEMO)
- *Company* National Centre for Atmospheric Research, Boulder Colorado

## TEACHING AND THESIS SUPERVISION

LECTURER IN THE PH.D. PROGRAMME FUTURE EARTH, CLIMATE CHANGE AND SOCIETAL CHALLENGES AT THE UNIVERSITY OF BOLOGNA:

- *NUMERICAL MODELING SPECIALISED COURSE (2019-2020)*

Co-TUTOR OF PH.D. THESES:

NAME	YEAR	PH.D. THESIS TITLE
IVANO BARLETTA	2020	UNSTRUCTURED-GRID SEAMLESS MODELING FOR THE SOUTHERN EUROPEAN SEAS

## SELECTED RESEARCH PROJECTS AND RESPONSABILITIES

01/2020– 12/2022

Italy- Croatia Interreg **AdriaClim- Climate change information, monitoring and management tools for adaptation strategies in Adriatic coastal areas**  
Scientific Leader and WP Leader for CMCC

07/2018 – 12/2022

HORIZON 2020 **OPERANDUM-** OPEn-air laboRAtories for Nature baseD solUtions to environmental risks  
Scientific Leader for CMCC

07/2018 – 12/2019

Innonetwork **SAGAcE** - Sistema Avanzato di monitoraGgio Ambientale

09/2017

**Organizing committee** of the **Coastal Hydrology and Surface Processes linked to Air/Sea Modeling: 1st community of users workshop**

05/2012 – 05/2015

P.O.N. **TESSA** - Development of technologies for the "Situational Sea Awareness"

05/2012 – 01/2015

Greece-Italy Interreg **IONIO** - IONian Integrated marine Observatory

## PEER REVIEWED PAPERS

- **Verri, G.**, Kurdistani, S., Coppini, G., Valentini, A. (2020). Recent advances of a box model to represent the estuarine dynamics: time-variable estuary length and eddy diffusivity. *Paper Submitted to Journal of Advances in Modeling Earth Systems (JAMES)*
- **Verri, G.**, Pinardi, N., Bryan, F., Tseng, Y. H., Coppini, G., & Clementi, E. (2020). A box model to represent estuarine dynamics in mesoscale resolution ocean models. *Ocean Modelling*, 148, 101587.
- Tintoré, J., Pinardi, N., Alvarez Fanjul, E., Balbin, R., Bozzano, R., Ferrarin, C., ..., **Verri, G.**,... & Clementi, E. (2019). Challenges for sustained observing and forecasting systems in the Mediterranean Sea. *Frontiers in Marine Science*, 6, 568
- **Verri, G.**, Pinardi, N., Oddo, P., Ciliberti, S. A., & Coppini, G. (2018). River runoff influences on the Central Mediterranean overturning circulation. *Climate dynamics*, 50(5-6), 1675-1703
- **Verri, G.**, Pinardi, N., Gochis, D., Tribbia, J., Navarra, A., Coppini, G., & Vukicevic, T. (2017). A meteorological modelling system for the reconstruction of river runoff: the case of the Ofanto river catchment. *Natural Hazards and Earth System Sciences*, 17(10), 1741.
- Coppini, G., Marra, P., Lecci, R., Pinardi, ..., **Verri, G.**, ... & Negro, G., 2017. *SeaConditions: a web and mobile service for safer professional and recreational activities in the Mediterranean Sea*, *Nat. Hazards Earth Syst. Sci.*, 17, 533-547, <https://doi.org/10.5194/nhess-17-533-2017>

## PROCEEDINGS PAPERS

- Coppini, G., Pinardi, N., Oddo, P., Awad, E., Bonaduce, A., Calcagnile, E., Ciliberti, S. A., Federico, I., Galati, M. B., Lecci, R., Liubartseva, S., Mancini, M., Mannarini, G., Shchekinova, E., **Verri, G.** (2013). The operational research in support to decisional instruments. Contribute to III Convegno Nazionale di Oceanografia Operativa, 3-5 June 2013, Oristano, Italy.
- Coppini, G., Liubartseva, S., Lecci, R., Creti, S., **Verri, G.**, Clementi, E., Pinardi, N., 2018. *Toward 3D Modeling the Plastic Marine Debris in the Mediterranean*. In *Proceedings of the International Conference on Microplastic Pollution in the Mediterranean Sea* (pp. 37-45). Springer, Cham
- Umgiesser G, Garreau Pierre, Arcilla As, Clementi E, Salon S, Ravdas M, Federico I, Zodiatis G, Ferrarin C, **Verri G**, Cossarini G, Sotillo Mg, Cucco A, Sorgente R, Mourre B, Vilibic I, Sammartino S, Coppini G, Fanjul Ea (2018). Modeling in the Mediterranean Sea: the MonGOOS contribution. Operational Oceanography serving Sustainable Marine Development. Proceedings of the Eight EuroGOOS International Conference. 3-5 October 2017, Bergen, Norway. E. Buch, V. Fernández, D. Eparkhina, P. Goringe and G. Nolan (Eds.) EuroGOOS. Brussels, Belgium. 2018. D / 2018 / 14.040 / 1 ISBN 978-2-9601883-3-2. pp.295-304. <https://archimer.ifremer.fr/doc/00450/56155/>

## POST GRADUATED EDUCATION

- *Dates (from – to)*
- *Institution*

January 2013 – May 2016  
Bologna University

- *Research Topics*

### PhD in Environmental Science

Project Title: Predictability studies for Regions Of Freshwater Influence, ROFIs.

- *Dates (from – to)*
- *Institution*
- *Achieved Title*

December 2009 - March 2011

Università degli studi di Roma La Sapienza

### II level Master In Energy Efficiency and Renewable Energies (EFER)

## EDUCATION

- *Dates (from – to)*
- *Institution*
- *Topic*
- *Achieved Title*
- *National title class*

November 2006 – July 2009

Universita' del Salento

### Geophysics. Atmosphere Physics and Oceanography

110/110 cum laude . Thesis Title "Measure and Assess of turbulent fluxes on complex real topography"

**Master's Degree** (20/S class)

- *Dates (from – to)*
- *Institution*

November 2002 – October 2006  
Universita' del Salento

- *Topic* Physics
- *Achieved Title* 110/110 cum laude. Thesis Title "Gravity anomalies and structure of lithosphere"
- *National Title Class* **Bachelor's degree** (25 class)
- *Dates (from – to)* September 1997 - July 2002
- *Institution* Banzi Bazoli High school Lecce
- *Achieved Title* 100/100 cum laude
- *National title class* High school diploma

## LANGUAGE SKILLS

MOTHER TONGUE

**Italian**

OTHER LANGUAGE

Self-assessment

**English**

**C1 Level in Reading and Writing, B2 Level in Speaking and Listening**

European level (\*)

(\*) Common European Framework of Reference for Languages

## TECHNICAL SKILLS

Working with the ocean models NEMO and Shyfer for regional to coastal scale applications  
Working with hydrology model WRF HYDRO. Working with mesoscale meteorological model WRF.

Working with mesoscale meteorological model PSU/NCAR, MM5, and diagnostic microscale model WindSim.

Very good competence using operating system Windows, Linux and Mac OS X.

Excellent knowledge of packages of operators for manipulating netCDF and GRIB files: NCO and CDO

Good competence in Parallel Computing with MPI and OPENMP

Excellent knowledge of compiled and interpreted languages as Fortran, Matlab, NCL

Basic knowledge of Python interpreted languages

Excellent knowledge of Latex markup language

Basic knowledge of GIS software: QGIS and ArcGIS

Signature



\_\_\_\_Giorgia Verri\_\_\_\_