



## Federica Borile

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Date of birth: 02/12/1991 Nationality: Italian

### WORK EXPERIENCE

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[ 01/07/2022 – Current ] **Post-doc, research grant**

**University of Bologna**

**City:** Bologna

**Country:** Italy

**Main activities and responsibilities:**

The vertical circulation of the Atlantic Ocean, analysis with and without tides

[ 04/2021 – 06/2022 ] **collaboration contract**

**CMCC Foundation**

**City:** Bologna

**Country:** Italy

**Main activities and responsibilities:**

Tidal effects on mesoscale structures from a hierarchy of numerical simulations of the global ocean

[ 08/2016 – 10/2016 ] **collaboration contract**

**CMCC Foundation**

**City:** Bologna

**Country:** Italy

**Main activities and responsibilities:**

Analysis of the overturning circulation in the Mediterranean Sea.

### EDUCATION AND TRAINING

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[ 11/2016 – 06/2022 ] **PhD**

**University of Bologna, in collaboration with CMCC Foundation**

**Field(s) of study:** Oceanography

**Thesis:** "Towards a broader understanding of the effects of tidal forcing on the global ocean circulation"

**Main subject / occupational skills covered:**

Advisors: dott. Simona Masina, dott. Doroteaciro Iovino, prof. Nadia Pinardi and Prof. Paola Cessi

Note: I was granted 17 months of maternity leave (12+5) for two different maternities. Moreover, the PhD has been extended for 3 months because of COVID-19 pandemic period.

[ 08/2014 – 07/2016 ] **Master degree**

**University of Bologna**

**Field(s) of study:** geophysics

**Final grade:** 110/110 cum laude

**Thesis:** "On the Mediterranean Conveyor Belt System"

**Main subject / occupational skills covered:**

Master's Degree in "Fisica del Sistema Terra"

Thesis advisors: Prof. Nadia Pinardi and prof. Paola Cessi

[ 08/2013 – 09/2014 ] **master courses**

**University of Pisa**

**Field(s) of study:** applied geophysics

**Main subject / occupational skills covered:**

Master's courses on "Geofisica di Esplorazione e Applicata"

*Courses attended:*

- "Exploration Seismology and Geophysical Log"
- "Signal processing in Physics"
- "Fundamentals of Geology"
- "Fundamentals of Geophysics"

laboratory experience dealing with real data

[ 08/2010 – 10/2013 ] **Bachelor degree**

**University of Pisa**

**Field(s) of study:** Physics

**Final grade:** 110/110

**Thesis:** "Langmuir circulation and boundary layers in the atmosphere".

**Main subject / occupational skills covered:**

Thesis advisor: prof. Steve Shore

## LANGUAGE SKILLS

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**Mother tongue(s):** Italian

**Other language(s):**

**English**

**LISTENING B2 READING B2 WRITING B2**

**SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2**

## DIGITAL SKILLS

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### My Digital Skills

#### Operating systems

Unix | Microsoft

#### Programming languages

Python | C | Matlab | Fortran 90 | NCL

#### Scripting languages

bash | shell

#### Other programs

QGIS

## PUBLICATIONS

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[ 2019 ] **The Mediterranean Sea Overturning Circulation**

<https://doi.org/10.1175/JPO-D-18-0254.1>

Pinardi, N., Cessi, P., Borile, F., and Wolfe, C. L. P. (2019). The Mediterranean sea overturning circulation. *Journal of Physical Oceanography*, 49(7):1699-1721.

[ 2019 ]

**The Eastern and Western Mediterranean Overturning Index interannual variability**

<https://doi.org/10.1080/1755876X.2020.1785097>

Lyubartsev, V., Borile, F., Clementi, E., Masina, S., Drudi, M., Coppini, G., Cessi, P., Pinardi, N. (2019): The Eastern and Western Mediterranean Overturning Index interannual variability, Section 2.4 in Copernicus marine service ocean state report, issue 4. *Journal of Operational Oceanography*.

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*I authorize the use of my personal data pursuant to D.Lds. 30/06/2003, n.196 "Codice in materia di protezione dei dati personali"*

*Bologna, 04/07/2022*

*Federica Bonily*