

<http://mongoos.eu>

### About MonGOOS

The Mediterranean Operational Network for the Global Ocean Observing System (MonGOOS) was established in 2012 to further develop operational oceanography in the Mediterranean Sea. MonGOOS comprises the previous activities of MOON and MEDGOOS. MonGOOS is promoting partnerships and capacity building for GOOS in the Mediterranean Sea, creating a continuous working framework with EuroGOOS and GOOS Africa in order to define common roles and activities in the region, fostering collaboration with Black Sea GOOS and global ocean GOOS initiatives. MonGOOS represent the EuroGOOS Roos in the Mediterranean Sea and collaborate to the consolidation and further expansion of operational oceanography in the Mediterranean Sea.

### MonGOOS View

- Promotion of a science-oriented view and EOOS
- Interaction with other R&D communities
- To foster applications for societal benefit
- Integration of Mediterranean countries and foster cooperation

### Partners

46 members from 14 countries

### Chairs

*Vanessa Cardin* – OGS, Italy

*Karim Hilmi* – IOC, Morocco

### WORKSHOP Scientific Committee

*Vanessa Cardin* (OGS, Italy)

*Alejandro Orfila* (CSIC-IEO, Spain)

*Carlo Brandini* (LAMMA, Italy)

*Emanuela Clementi* (CMCC, Italy)

*Sara Morucci* (ISPRA, Italy)

*Alejandro Caceres Euse* (Univ. of Toulone, France)

### Local Organisers

*Carlo Brandini* (LAMMA-CNR ISMAR, Italy)

*Manuela Corongiu* (LAMMA, Italy)



## WORKSHOP ON THE IMPORTANCE OF SCALES AND UNCERTAINTIES IN OCEAN TRANSPORT: PHYSICAL AND BIOGEOCHEMICAL INTERACTIONS IN THE MEDITERRANEAN SEA

**November 22<sup>nd</sup> and 23<sup>rd</sup>, 2022**

*Venue:*

*Sant'Apollonia Auditorium (22.11.22) & Military Geographic Institute (23.11.22)*

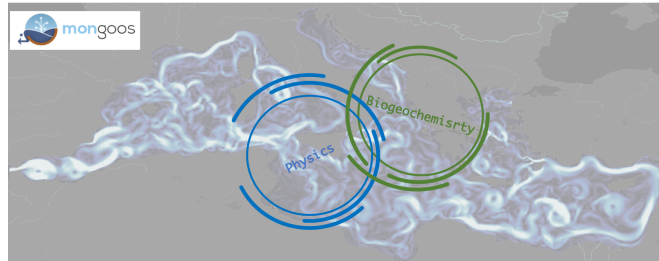
*Florence - Italy*

*The workshop will be followed by the MONGOOS General Assembly on November 24<sup>th</sup>*



## Objective of the WORKSHOP

Understanding transport and mixing properties in ocean flows is a challenging problem not only from the theoretical perspective but also in terms of more applied issues such as oil spill management, SAR operations, plankton distribution and ecological connectivity. Owing to its turbulent nature, ocean dynamics is highly complex, making the assessment of water pathways and the study of oceanic transport phenomena an extraordinarily complicated task. Ocean hydrodynamics is characterised by a complex interaction of multiscale processes in which energy input from the atmosphere, together with its dissipation, leads to specific dynamical features whose spatial and temporal characteristics cover a wide range of scales. These multiscale dynamical processes have profound implications for the transport and dispersion of biogeochemical tracers, knowledge of which is critical to understanding the mechanisms regulating marine ecosystems. Despite improvements in ocean models and observations, the dynamical processes involving multiscale interactions in the Mediterranean Sea are still not fully represented, leading to uncertainties at all ocean scales.



**Mediterranean Sea Circulation**

## WORKSHOP Topics

This Workshop invites contributions that address ocean transport at multiple scales and aim to advance in the understanding of the interaction between physical and biological processes (i.e. from biogeochemical tracers to higher trophic levels) as well as with SAR operations, and transport (jellyfish, larvae, plastics, etc.). We welcome studies dealing with modelling approaches, ocean observations including multiplatform infrastructures (drifters, HF radars, satellite data, etc.) and uncertainties assessment (i.e. forecast error, ensemble spread, probability distribution, threshold exceedance, etc.), emphasising multidisciplinary interactions. The interdisciplinary nature of the biological, biogeochemical and physical interactions of this meeting promotes the exchange of ideas and contributions across different fields, such as

physical and biological oceanography, complex systems, marine ecology, geophysical fluid dynamics and applied mathematics.

## Instructions for contribution submission:

Abstract (one page max.) must be uploaded to the following link:

<https://forms.gle/2LzHpm9wv12VT9TP8>

- 10 minutes lecture + 3 minutes discussion.
- Each author may submit one paper to each session.
- If there is not enough time to present all accepted papers orally, some may be presented in the form of posters.

## Important dates:

**04.11.22** Deadline registration & abstract submission

**11.11.22** Acceptance Communication