

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

November 22nd & 23rd, 2022 - Florence (IT)

November 22nd Auditorium Sant'Apollonia, Via San Gallo, 25A, Florence

14.30 – 14.45	WELCOME <i>MonGOOS Co-chairs and Local Organizers</i>
14.45 – 17.30	Session 1: Understanding ocean transports, mixing properties and multiscale processes from ocean observations <i>Chairs: Vanessa Cardin, Carlo Brandini</i>
14.45 – 15.00	Katrin Schroeder (CNR-ISMAR) Long-term time series of physical data collected in two of these choke points: the Sardinia Channel and the Sicily Channel
15.00 – 15.15	Pierre Garreau (IFREMER) High-resolution data revisited in the perspective of a planned SWOT calibration/validation experiment in the north-western Mediterranean Sea
15.15 – 15.30	Hrvoje Mihanović (Institute of Oceanography and Fisheries) Multiplatform approach to monitoring and research of exceptionally high salinities in the Adriatic Sea since 2017
15.30 – 15.45	Felipe de Luca Lopes de Amorim (OGS) The EMSO-E2M3A Southern Adriatic Regional Facility: Interconnectedness of a variety of processes at different spatial and temporal scales, their interaction and recurrence
15.45 – 16.00	Manuel Vargas-Yáñez (Instituto Español de Oceanografía) Latest results from RADMED project: Updated climatological fields, Water mass transports through the Balearic Channels, and changes in the mixed layer depth.
16.00 – 16.30	Coffee break
16.30 – 16.45	Alejandro Orfila (IMEDEA CSIC-UIB) Ageostrophic contribution by the wind and waves induced flow to the lateral stirring in the Mediterranean Sea
16.45 – 17.00	Antonio Guarnieri (INGV) Tracking our own trash: following the dispersal of floating litter from the Arno river using open source technology and a citizen science-based approach
17.00 – 17.15	Laura Ursella (OGS) Calibration and validation of HF coastal radar waves exploiting in situ observations and CMEMS data in the South-East Sicily
17.15 – 17.30	Dijana Klaric The New Croatian met-ocean buoys network moored at open sea area-oceanographic currents profiling
17.30 – 17.45	Asma Damghi (Abdelmalek Essaadi University) The implementation of the oceanographic platform "ZYPHIUS" of the marine observatory of Al Hoceima
17.45 – 18.30	Poster Session: 3' presentations + 2' questions
18.30	Ice Breaker - courtesy of LAMMA

November 23rd

Auditorium Centro Congressi al Duomo, Via de' Cerretani 54/R, Florence

09.00 – 12.30	Session 2- Morning: Modeling approaches in representing ocean dynamics, transports and their uncertainties. <i>Chairs: Alejandro Orfila, Karim Hilmi</i>
09.00 – 09.15	Luca Arpaia (CNR ISMAR) Surface layer insertion/removal with z-coordinates for accurate representation of free-surface flows in ocean models
09.15 – 09.30	Sara Morucci (ISPRA) Sea Level and Uncertainty Prediction
09.30 – 09.45	Katerina Spanoudaki (Foundation for Research and Technology Institute of Applied and Computational Mathematics) The Cretan Sea high-resolution local Digital Twin for the ILIAD Digital Twin of the Ocean
09.45 – 10.00	Riccardo Martellucci (OGS) Impact of the Medicane Apollo on a cyclonic vortex of the Ionian Sea
10.00 – 10.15	Emanuela Clementi (CMCC) The Copernicus Mediterranean Analysis and Forecasting Physical System: latest model upgrades and accuracy
10.15 – 10.30	Michele Bondoni (LaMMA) 4D-Var Data Assimilation of HF-Radar Derived Surface Currents and their Impact on Surface Transport in the North-Western Mediterranean Sea
10.30 – 11.00	Coffee break
11.00 – 11.15	Aimie Moulin (CMCC) Assessment of wave-current interactions on the Mediterranean Sea dynamics through numerical experiments
11.15 – 11.30	Bethany McDonagh (CMCC - UniBO) Study of the effect of tides on vertical motion and mixing in the Mediterranean Sea using numerical experiments
11.30 – 11.45	Christian Ferrarin (CNR-ISMAR) Seamless ocean modelling in the Adriatic Sea
11.45 – 12.00	Florian Kokoszka (Stazione Zoologica di Napoli Anton Dohrn) Gulf of Naples Advanced Model (GNAM), A Multiannual Comparison with Coastal HF Radar Data, and Hydrological Measurements in a Coastal Tyrrhenian Basin: Insights about Perspective
12.00 – 12.15	George Zodiatis (ORION) Downscaling at near-coastal areas: MUSAN underwater park in Ayia Napa
12.15 – 12.30	Luca Repetti (Istituto Idrografico della Marina) The contribution of the Istituto Idrografico della Marina (IIM) to the marine monitoring: SWIM-LIG campaigns
12.45 – 14.00	Lunch break
14.00 – 15.15	Session 2- Afternoon: Modeling approaches in representing ocean dynamics, transports and their uncertainties. <i>Chairs: Emanuela Clementi, Sara Morucci</i>
14.00 – 14.15	Stefania Ciliberti (Nologin Consulting SLU) Advances in NOW services based on ocean modelling in the Western Mediterranean.
14.15 – 14.30	Chair Adil (Chouaib Doukkali University)

	Hydrodynamics and water transport in Nador Lagoon(morocco) modelling approach
14.30 – 14.45	Andrea Cucco (CNR-IAS) Assessing the risk of oil spill impacts and potential biodiversity loss for coastal marine environment at the turn of COVID19 Pandemic event
14.45 – 15.00	Svitlana Liubartseva (CMCC) Oil spill modelling: progress under the FIRESPIR project
15.00 – 15.15	Fabio Giordano (OGS) High-resolution oceanographic modelling to assess the feasibility of marine energy production: a case study in the northern Adriatic
15.15 – 15.45	Coffee break
15.45 – 17.30	Session 3: Biological, biogeochemical and physical interactions.
15.45 – 16.00	Marta Balsells (Universitat Politècnica de Catalunya) Biological response to hydrodynamic factors in a shallow water microtidal estuary
16.00 – 16.15	Ginevra Rosati (OGS) Biogeochemical and physical drivers of MeHg dynamics in the Mediterranean Sea: insights from a coupled 3D model
16.15 – 16.30	Stefano Querin (OGS) The SHAREMED relocatable hydrodynamic-biogeochemical modelling system for short-term forecasts in the Mediterranean Sea
16.30 – 16.45	Ismael Hernández-Carrasco (CSIC-UIB) Dynamical coherence of oceanic structures and its impact on phytoplankton communities
16.45 – 17.00	Andrea Casaucao Aguilar (SOCIB) Interannual variability of the Balearic Islands front during the bluefin tuna spawning season
17.00 – 17.15	Diego Alvarez-Berastegui (CN-IEO-CSIC) Advances Connecting MONGOOS strategies and objectives with Mediterranean Fisheries Management Organizations
19.30	Social Dinner at Trattoria Zà Zà, - courtesy of OGS Piazza del Mercato Centrale, 26R, Florence