

Wednesday, 18 June

Theme 5: AI/ML applications in the coastal ocean prediction

Chair: Pierre de Mey-Fremaux, CNRS

Rapporteur: Ronan Fablet, Ifremer

09:00-09:20	AI in the Digital Twins of the Ocean: Opportunities and Challenges	Ronan FABLET	Ifremer
09:20-09:40	Equation discovery for climate impact: symbolic regression to emulate climate impact indicators for unseen scenarios	Erwan LE ROUX	IMT Atlantique
09:40-10:00	Observational data-driven model to understand onset and decline of marine heatwaves in the Mediterranean	Amélie SIMON	LOPS/Ifremer
10:00-10:20	Developing data-driven ocean models for the Norwegian coast and fjords using graph neural networks	Ina K. B. KULLMANN	Norwegian Meteorological Institute
10:20-10:50	Coffee Break		
10:50-11:10	A deep learning approach for coastal downscaling: the northern Adriatic Sea case-study	Federica ADOBBATI	National Institute of Oceanography and Applied Geophysics, Italy
11:10-11:30	Statistical spatial wave downscaling in a regional sea from the global ERA5 dataset	Bing YUAN	Hereon, Germany
11:30-11:50	Discussion - Theme 5 (20 min)		
11:50-12:30	POSTER SESSION (40 min)		
12:30-14:00	LUNCH (90 min)		
Theme 6: User applications and decision tools / digital twins			
14:00-14:20	Operational Ocean Monitoring and Forecasting Services for decision-making at coastal	Marco Sotillo	NOW Systems
Theme 2: Ocean modelling at the regional and shelf sea spatial scales and seamless integration with larger-scale estimates (focus on processes)			
Chair: Buoung-Ju Choi, Chonnam National University			
Rapporteur: Baptiste Moure, CSIC-UIB			
14:20-14:40	Wave-flow coupling of SWAN with an unstructured model.	Mike HERZFELD	CSIRO
14:40-15:00	Modelling convective plumes in the framework of a quasi-non-hydrostatic approach	Pierre GARREAU	Ifremer
15:00-15:20	Ocean Forecasting and Analysis Systems as a Tool to Investigate Coastal Trapped Waves Along the Brazilian Continental Margin	Breno CABRAL	Physical Oceanography Laboratory - LOF/COPPE, Federal University of Rio de Janeiro
15:20-15:50	Coffee Break		
15:50-16:10	On the effect of different grid resolutions and mixing schemes on vertical dynamics in coastal ocean models: a case-study in a shallow, semi-enclosed basin (northern Adriatic)	Fabio GIORDANO	National Institute of Oceanography and Applied Geophysics - OGS
16:10-16:30	Persistent coastal temperature biases in km-scale climate models due to unresolved ocean mixing	Audrey DELPECH	CNRS / Physical and Spatial Oceanography Laboratory
16:30-16:50	Study of the regional earth system under climate change and human activities in the Greater Bay Area	Jianping GAN	The Hong Kong University of Science and Technology
16:50-17:10	Discussion (Theme 2.1: Regional and shelf sea processes) - 20 min		
17:10-18:00	POSTER SESSION (50 min)		