| Wednesday, 18 June   |  |                    |  |
|--|--|--------------------|--|
| Chair: Pierre de   | IL applications in the coastal ocean prediction<br>Mey-Fremaux, CNRS<br>nan 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<br>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 -12:40   | Welcome to the COSS-TT meeting, P. Moal, Ifremer Bretagne Centre   |                    |  |
| 12:40-14:00  | LUNCH (80 min)   |                    |  |
| Theme 6: Use   | r 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: Byoung-Ju Choi, Chonnam National University  Rapporteur: Baptiste Mourre, 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<br>Along the Brazilian Continental Margin  | Breno CABRAL       | Physical Oceanography Laboratory -<br>LOF/COPPE, Federal University of Rio de<br>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<br>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<br>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)  |                    |  |