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6th Summer School on Theory, Mechanisms and Hierarchical Modelling of Climate Dynamics: Artificial Intelligence and Climate Modelling | (smr 4067)

Wednesday 14 May 2025

notitle - Kastler Lecture Hall (AGH) (09:30-16:15)

time	title	presenter
09:30	Linking Research to Action: Exploring the Value of AI-Driven Rainfall Forecasts over the Greater Horn of Africa	SHRUTI NATH
11:00	Coffee Break	
11:30	AI And Regional Climate Downscaling	VALENTINA BLASONE
12:30	Lunch	
14:00	AI-Driven reconstruction of oxygen profiles in the North Atlantic Oxygen Minimum Zone	DOMITILLE TIHAINE CORON
14:15	Towards a Physics-Informed Neural Network for Ocean Circulation Modelling	IURI GORENSTEIN
14:30	Learning the Ocean: Leveraging AI to Improve Ocean Data Assimilation	DAVIDE GRANDE
14:45	Reconstruction of the Surface Geostrophic Current in the Mediterranean Sea from Absolute Dynamic Topography Generated by Generative Adversarial Network (Adtgan)	GASANA ELYSEE MANIMPIRE
15:00	Coffee Break	
15:30	A machine learning method is used to identify sources of long-term ENSO predictability in the ocean (sea surface temperature (SST) and heat content) and the atmosphere (near-surface zonal wind (U10)). Tropical 10m wind sseem to represents an inreresting source of ENSO predictability	IOANA COLFESCU
15:45	Data-Informed Inversion Model (DIIM): a framework to retrieve marine optical constituents in the BOUSSOLE site using a three-stream irradiance model	CARLOS ENMANUEL SOTO LOPEZ
16:00	A Probabilistic Forecast for Multi-year ENSO Using Bayesian Convolutional Neural Network	BALAJI BADURU