



Special Session 19 - “Improvements in climate models for attribution, extreme phenomena and climate change impacts”

Building: Rettorato

Room: Accademia Peloritana dei Pericolanti

Thursday, September 10	
11:00 – 11:20	Masahiro Yamamoto <i>Time-fractional degenerate diffusion equations as possible model for climate changes</i>
11:20 – 11:40	Genni Fragnelli <i>Null-controllability for degenerate PDEs: A climatological application.</i>
11:40 – 12:00	Carlos Frederico Mendonça Raupp <i>A Possible Dynamical Mechanism for Global Warming Impact on Nature Climate Variability and Extreme Climate Events</i>
12:00 – 12:20	Giovanni Conti <i>Data as the Backbone of Climate Science: Novel Data Assimilation Pathways with Transfer Operators and Graph Attention Networks</i>
12:20 – 12:40	Pedro Leite da Silva Dias <i>Mathematical Representations of Earth System Dynamics: From Phase Space to Interacting Natural Modes</i>
12:40 – 13:00	Anna Vidotto <i>Testing for Non-Stationarity in Time-Dependent Spherical Random Fields</i>
Friday, September 11	
8:30 – 8:50	Gianmarco Del Sarto <i>A Multiplicative-Noise Mechanism for Variability Amplification under Radiative Forcing in an Arctic Energy-Balance Model</i>
8:50 – 9:10	Tobias Kuna <i>Reconstruction of wide spectrum forcing in transport-diffusion and Navier-Stokes equations</i>
9:10 – 9:30	Daria Ghilli <i>Optimal policies for environmental assets under spatial heterogeneity and global awareness</i>
9.30-9.50	Andrea Vito Vacca <i>Climate change reduces the subseasonal variability of the North Atlantic jet stream</i>
9:50 – 10:10	Giuseppe Floridia <i>Recent Advances in the Analysis of Energy Balance Climate Models</i>