



14 – 19, July  
Aveiro, Portugal



# Earth Systems Summer School 2024



Land-Atmosphere-Ocean Interactions  
in a Changing Planet:  
A hands-on approach to Earth  
observation and modelling



For PhD students and other post-graduate students in all topics of **Earth System Science**, including Meteorology and Climate, Physical Oceanography, Geology, Geodesy, Geophysics and Environment.

## Course Description

The summer school will include lectures, hands-on sessions and field trips on various topics of Earth Systems. We will focus on the dynamics of and interactions between the different spheres of the Earth: solid Earth, ocean, atmosphere and biosphere.

Lectures will focus on state-of-the art research and recent advances. Hands-on sessions will include observation, field work, and data analysis. The topics of hands-on sessions will cover atmospheric processes, coastal environments, oceanic and estuarine dynamics, geophysics & geodynamics, and machine learning. Field work includes both land and ocean observations.



## Organization

João Miguel Dias, CESAM & Univ. Aveiro  
Daniele Bortoli, ICT & Univ. Évora  
Pedro Costa, IDL & Univ. Coimbra  
Pedro Miranda, IDL & FCUL, Univ. Lisbon  
Susana Custódio, IDL & FCUL, Univ. Lisbon

## Fee: 300 euros

The fee includes the registration, lodging in university student accommodation, lunches, dinners and field trips. All other costs, including traveling to the venue, must be covered by the students.



## Location

Lectures and Practicals at Aveiro University;  
Field activities in Aveiro Lagoon, Geoparque Arouca and Vagueira Beach



## Applications

Pre-application deadline: 1/Mar/2024. For applications received until this date, the organization will prioritize candidates in the two first years of their PhD programs. We will also aim to maximize networking between students from different scientific areas and institutions. After the pre-application deadline, applicants will be selected on a "first come, first served" basis. Final deadline: 31/May/2024. Applications should be sent by email to [earthsystems@fc.ul.pt](mailto:earthsystems@fc.ul.pt). Applications must include the applicant's CV and a short motivation letter from the candidate, including the title of the PhD, supervisors and year of PhD. Maximum number of students: 35.



# Lecturers

Opening Address by Sierd Cloetingh, Geosciences & Tectonics, University of Utrecht

João Miguel Dias, Physical Oceanography, CESAM & Aveiro University

Francisco Doblás Reyes, Climate Modelling, Barcelona Supercomputing Center

Wouter Schellart, Geodynamics, Vrije Universiteit Amsterdam

Juan Picos, Forest Fires, Vigo University

Ágata Dias, Marine Georesources, IDL & FCUL, Lisbon University

Alexandra Paz, Geology, Geoparque Arouca

Caroline Ferreira, Physical Oceanography, IDL & ARDITI

Daniele Bortoli, Atmospheric Physics, ICT & Évora University

Davide Gamboa, Marine Geology, CESAM & Aveiro University

Emanuel Dutra, Climate Modelling, IPMA & IDL

Flávio Couto, Atmospheric Sciences, ICT & Évora University

Henrique Duarte, Marine Geophysics, Geosurveys

Isabel Trigo, Remote Sensing, IDL & IPMA

Joana Ribeiro, Environmental Geology, IDL & Coimbra University

Luís Matias, Seismology, IDL & FCUL, Lisbon University

Magda Sousa, Physical Oceanography, CESAM & Aveiro University

Maria João Costa, Atmospheric Physics, ICT & Évora University

Mário Abel Gonçalves, Geochemistry, IDL & FCUL, Lisbon University

Marta Neres, Geophysics, IDL & IPMA

Miguel Neves, Seismology, GeoAzur Nice

Miguel Potes, Atmospheric Physics, ICT & Évora University

Nuno Vaz, Physical Oceanography, CESAM, & Aveiro University

Paulo Batista, Marine & Coastal Geology, CESAM & Aveiro University

Paulo Silva, Physical Oceanography, CESAM & Aveiro University

Pedro Costa, Coastal & Marine Geology, IDL & Coimbra University

Pedro Miranda, Meteorology, IDL & FCUL, Lisbon University

Pedro Mocho, Paleontology, IDL & FCUL, Lisbon University

Rodrigo Amaro e Silva, Solar Energy, Centre OIE - MINES Paris

Rui Salgado, Atmospheric Physics, ICT & Évora University

Sara Silva, Machine Learning, LASIGE & FCUL, Lisbon University

Susana Custódio, Seismology, IDL & FCUL, Lisbon University

Vanda Salgueiro, Atmospheric Physics, ICT & Évora University

