CriticalEarth

Multiscales and Critical Transitions in the Earth System

The objective of CriticalEarth is to **train 15 early stage researchers** (ESR) to develop **new methods to assess the risks of critical transitions in the climate.**

The consortium will investigate the **model behaviour** through the model hierarchy moving from low to high dimensionality and from simple to complex dynamics.

The training program aims to enable the ESR to **generate, integrate and apply multidisciplinary knowledge** and will give them competences for international collaboration and inter-sectional work in academia, industry and governmental and non-governmental institutions.

CriticalEarth's outcomes will be 15 trained scientists; groundbreaking new understanding of multiscale dynamics in the Earth system and better foundations for assessing and avoiding irreversible climate change.

The PhD enrolled in **Politecnico di Torino will be working on**: "Mechanisms of low-frequency oscillations of Meridional Overturning Circulation in an EMIC and in a state-of-the-art fully-coupled Earth- System model" and will be hosted at Department DIATI premises.

PROJECT DURATION
48 months
(from 01/03/2021 to 28/02/2025)

WEBSITE AND SOCIAL MEDIA
www.criticalearth.eu

PARTNERS

- Kobenhavns Universitet (Coordinator - DK)
- Freie Universitaet Berlin (DE)
- Technische Universitaet Muenchen (DE)
- Universitetet i Tromsoe - Norges Arktiske Universitet (NO)
- Universiteit Utrecht (NL)
- The University of Exeter (UK)
- The University of Reading (UK)
- Politecnico di Torino (IT)
- Institut Royal Météorologique de Belgique (BE)
- École Normale Supérieure de Lyon (FR)
- Universidad Complutense de Madrid (ES)
- Carl von Ossietzky Universitaet Oldenburg (DE)

FUNDING INSTRUMENT
H2020-MSCA-ITN-2019

BUDGET
Funding allocated to DIATI: **261.499,68 €**

POLITO and DIATI's role:
Politecnico di Torino – DIATI is a member of the Consortium, under the scientific responsibility of **Prof. Jost von Hardenberg**.

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