

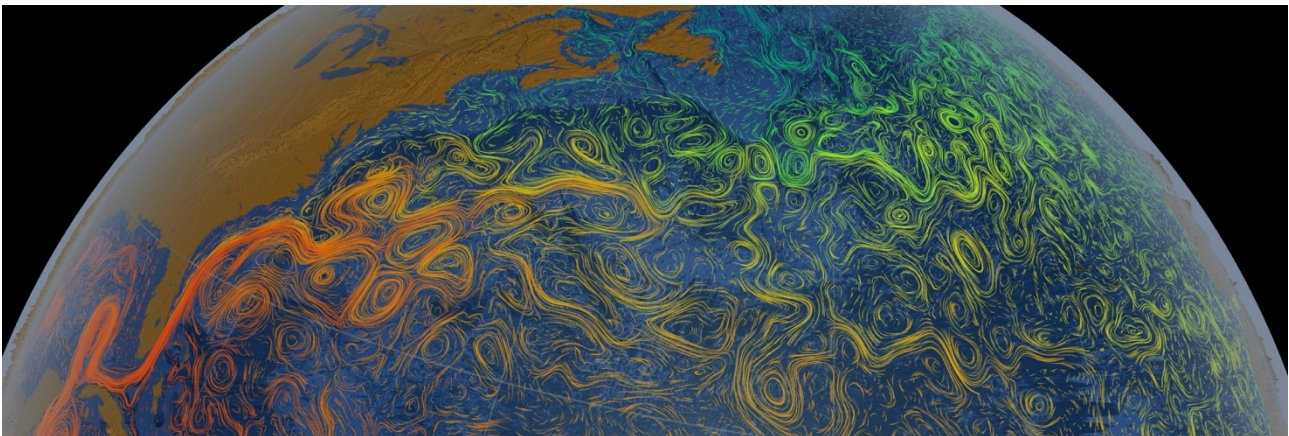
Seminario

Unveiling the Ocean's influence on future climate change impacts

Giovedì, 5 ottobre – ore 16:30
Aula Arduino

Relatore: **Dr.ssa Katinka Bellomo**

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Credit: NASA/Goddard Space Flight Center Scientific Visualization Studio

In this seminar, I will explore recent advancements in our understanding of the ocean's role in the climate system, with a particular focus on the Atlantic Meridional Overturning Circulation (AMOC) and its implications for future climate change. Climate models project a decline in AMOC strength due to increased ocean stratification, but its relative impact compared to greenhouse gas-induced changes remains unclear. I will describe our recent work addressing this issue, in which we have both examined climate model simulations in the Coupled Model Intercomparison Project (CMIP) archive, and also carried out idealized targeted experiments with a state-of-the-art global climate model (EC-Earth3). This seminar will offer a comprehensive understanding of the AMOC's significance, contributing to our knowledge of climate dynamics and future climate change scenarios. Join me as we delve into the intricate coupling between the Atlantic Ocean and the atmosphere, which influences the jet-stream, weather patterns, and precipitation, and discover the crucial role of the ocean in our evolving climate.

Proponente: **Francesco Marra**