





Mardi 24 Janvier 2017, 11:00 Salle R. Planel, bâtiment D1

C2N-Marcoussis, route de Nozay, 91460 Marcoussis, France

"Anthropogenic climate change and the global carbon cycle"

Laurent Bopp

Laboratoire des Sciences du Climat et de l'Environnement (LSCE) Institut Pierre-Simon Laplace (IPSL), Gif-sur-Yvette

"For the first time in human's history, last year global average of CO₂ in the atmosphere has exceeded 400 parts per million. And this increase in atmospheric carbon dioxide is responsible for most of the warming we have experienced in the past 50 years. In this seminar, I will start by assessing the recent evolution of anthropogenic carbon emissions, and show how this additional carbon is partitioned between the atmosphere, causing global warming, the ocean and the land biosphere. I will explain the mechanisms by which these carbon sinks, ocean and land biosphere, keep up by absorbing half of our carbon emissions. I will also show that these sinks are vulnerable, especially because of global warming, and that a reduced efficiency of the sinks may lead to a positive carbon-climate feedback in the coming decades".