CHAIRE ÉVOLUTION DU CLIMAT ET DE L'OCÉAN
CHAIRE FORMATION PLANÉTAIRE : DE LA TERRE AUX EXOPLANÈTES

COLLOQUE

28 & 29 mai 2026

La Terre, une planète dynamique

Un hommage à Xavier Le Pichon

Organisation :

Edouard BARD
Alessandro MORBIDELLI
Barbara ROMANOWICZ
Eric CALAIS

COLLÈGE DE FRANCE
1530

JEUDI 28 MAI (Amphithéâtre Marguerite de Navarre)

8h30 : Edouard Bard & Alessandro Morbidelli
Introduction

Chair Alessandro Morbidelli

The Planets of Our Solar System and How They Work

8h40 : Alessandro Morbidelli (Collège de France & OCA Nice)
Diversity of Terrestrial Planets

9h10 : Philippe Lognonné (IPG Paris)
The internal structure of Mars: results from the InSight mission

9h50 : Raphaël Garcia (ISAE Toulouse)
Lunar seismology: results and prospects

10h30 : pause

11h00 : Julia Maia (DLR Berlin)
The seismology of Venus: predictions and prospects of detections

11h40 : Attilio Rivoldini (ORB Bruxelles)
The internal structure of Mercury

12h20 : pause déjeuner

Chair Barbara Romanowicz

Global Geodynamics of the Earth

14h00 : Barbara Romanowicz
(Collège de France, UC Berkeley & IPG Paris)
Seismic constraints on global mantle dynamics

14h40 : Anne Davaille (FAST, Univ. Paris-Saclay)
The necessary conditions for Plate Tectonics: convection in complex fluids

15h20 : Nicolas Coltice (GéoAzur, Univ. Côte d'Azur)
Inner workings of Plate Tectonics

16h00 : Pause

16h30 : Isabelle Panet (IGN, IPGP, Univ. Paris Cité)
Mass structure of the convecting mantle: constraints using satellite gravity data

17h10 : Carmen Gaina (Univ. Oslo)
Frozen in pieces: The challenge of plate tectonic reconstructions of a fragmented Arctic

VENDREDI 29 MAI (Amphithéâtre Marguerite de Navarre)

Chair Laurent Jolivet

Lithosphere and earthquakes

8h30 : Mathilde Cannat (IPG Paris)
The formation of new lithosphere at mid-ocean ridges: magma fluxes, faults, earthquakes, and hydrothermal vents

9h10 : Serge Lallemand (CNRS, Géosciences Montpellier)
Lessons and open questions from the analysis of 125 years of subduction megaquakes

9h50 : Laurent Jolivet (Sorbonne Univ., Paris)
Deforming continents above a flowing mantle, a geological perspective

10h30 : pause

11h00 : Jean-Philippe Avouac (Caltech, Pasadena)
Crustal deformation and earthquakes in the India-Asia collision zone

11h40 : Alexandre Schubnel (ENS Paris)
Minerals matter, also during earthquakes!

12h20 : pause déjeuner

Chair Edouard Bard

Continental drift and paleoclimates

14h00 : Edouard Bard (Collège de France & CEREGE)
Introduction to the geological forcings of climate

14h40 : Kristel Chanard (IGN IPG Paris)
The interplay between water, ice and the solid Earth

15h20 : Emmanuelle Pucéat (UBE, Dijon)
The paleoclimate record and continental uplift

16h00 : Pause

16h30 : Bärbel Hönisch (LDEO Columbia Univ., New York)
Atmospheric CO_2 then and now - What can we learn from the past?

17h10 : Dan Lunt (Univ. Bristol)
The drivers of climate change over the last 550 million years - radiative forcings versus plate tectonics

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Un hommage à Xavier Le Pichon

Earth, a dynamic planet :

A tribute to Xavier Le Pichon

COLLÈGE DE FRANCE
1530

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