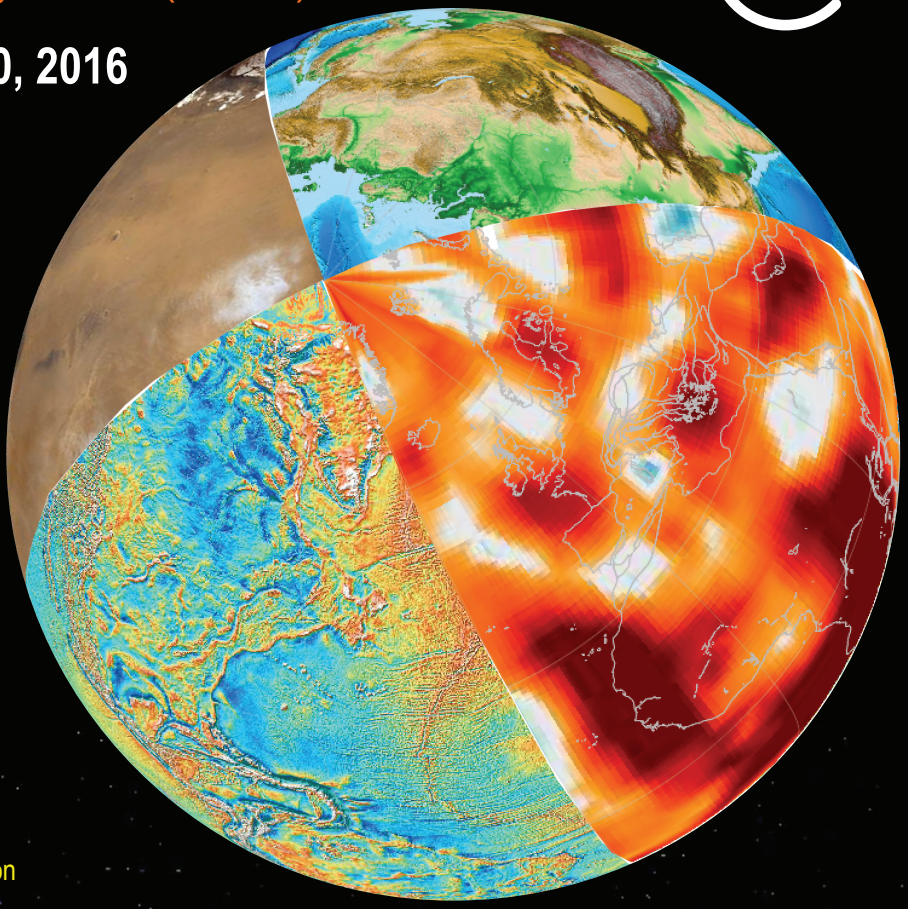
Graduate student course, Univ. of Oslo, GEO 9800 / GEO 5800

# Earth and planetary materials and dynamics

***Norwegian Research School for Dynamics and Evolution of Earth and Planets*** - DEEP

Centre for Earth Evolution and dynamics (CEED)



## Course week in Oslo: **April 25-30, 2016**

Further information: r.g.tronnes@nhm.uio.no

R.G. Trønnes,
Centre for Earth Evolution and Dynamics (CEED)
and Natural History Museum, Univ. of Oslo

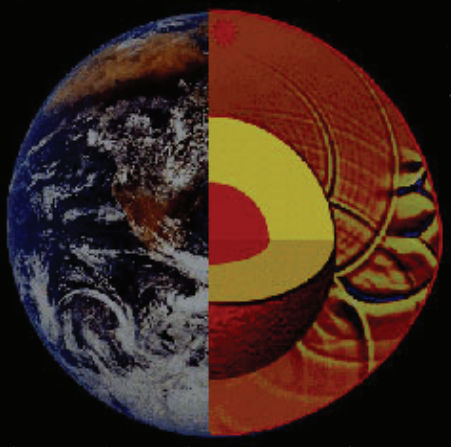
www.mn.uio.no/ceed/english/
www.earthdynamics.org/

**Application deadline: Jan. 6, 2016**
This is the Univ. Oslo official deadline
for "Visiting Ph.D.-students".
Contact: r.g.tronnes@nhm.uio.no

**5 ECTS**, based on attendence, oral presentation and home exam.

## Content

Composition and structure of the solar system
Accretion, core segregation and dynamic evolution of the terrestrial planets and asteroids
Seismological constraints on Earth's structure
Geochemical models of planetary formation and evolution
Pressure-induced modification of mineral structures
High-pressure experimental methods
Phase relations of silicates, oxides, peridotite and basalt under mantle conditions
Phase relations of Fe-Ni-dominated alloys under core conditions
Mineral physics and seismic velocity models
Seismic tomography of the Earth's mantle
The geodynamo and core-mantle interaction
Comparative planetology - the roles of plume and plate tectonics



## Main instructors

Reidar G. Trønnes, Stephanie C. Werner,
Valerie Maupin, Bernhard Steinberger

