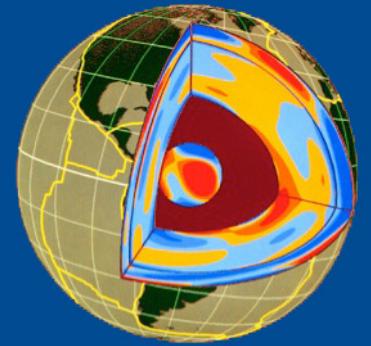


## CHAIRE DE PHYSIQUE DE L'INTÉRIEUR DE LA TERRE

Année académique 2011-2012

Mme Barbara ROMANOWICZ, Professeur



# Structure, composition and dynamics of the earth's core

Colloque en anglais, organisé avec James Badro

le vendredi 25 novembre 2011, de 9 heures à 19 heures

**9h00 - 9h15** **Introduction,** Barbara ROMANOWICZ, Collège de France

### Session 1 - Chair: Alexandre FOURNIER, IPG (Paris)

**9h15 - 9h55** Hemispherical properties of the inner core and the implications for a possible growing mechanism, Annie SOURIAU, Observatoire Midi-Pyrénées (Toulouse)

**9h55 - 10h35** Degree 1 structure in the inner core from normal mode and body wave data, Jessica IRVING, Cambridge University (UK)

**10h35 - 11h00** **Coffee Break**

### Session 2 - Chair: Razvan CARACAS, ENS (Lyon)

**11h00 - 11h40** Composition of the Earth's inner core from sound velocity measurements on iron and iron alloys, Daniele ANTONANGELI, IPG/UPMC (Paris)

**11h40 - 12h20** Ab initio calculations on iron and iron alloys at Earth's core conditions, Lidunka VOCADLO, UCL (UK)

**12h20 - 14h00** **Lunch**

### Session 3 - Chair: Guillaume FIQUET, IMPMC/UPMC (Paris)

**14h00 - 14h40** Geochemical constraints on the core formation and composition, Bernard BOURDON, ENS (Lyon)

**14h40 - 15h20** Constraining the light elements in Earth's outer core from observation, experiment and theory, Michael WALTER, university of Bristol (UK)

**15h20 - 15h50** **Coffee Break**

### Session 4 - Chair: Gauthier HULOT, IPG (Paris)

**15h50 - 16h30** Imaging the internal dynamical structure of Earth's core, Julien AUBERT, IPG (Paris)

**16h30 - 17h10** Seismic anisotropy of the inner core deduced from geodynamical and mineralogical models, Philippe CARDIN, Université Joseph Fourier (Grenoble) - co authors: R. Deguen, S. Merkel, A. Lincot

**17h10 - 18h00** **Panel Discussion:** Gauthier HULOT, Razvan CARACAS, Guillaume FIQUET & Alexandre FOURNIER

### Session poster de 17h30 à 19 heures dans la salle 4

#### ■ Amphithéâtre Maurice Halbwachs

11, place Marcelin-Berthelot - Paris 5<sup>e</sup>

[www.college-de-france.fr](http://www.college-de-france.fr)

Accès libre dans la limite des places disponibles

L'Administrateur du Collège de France  
**Pierre Corvol**