

A coupled core-mantle evolution

Saturday, July 30, 2022 4:55 PM (25 minutes)

I would give a brief review on the topic concerning the core-mantle co-evolution in terms of thermal and chemical evolution of Earth's core constrained from the mantle dynamics of Earth. In this talk, several controversial aspects in current understandings of thermal and chemical evolution of the Earth's core will be introduced: 1. The age of inner core (greatly uncertain in between ~1 Ga to 3 Ga) and potential energy source for geodynamo operating over 4 billion years, 2. Emergence of stably stratified region at the uppermost outer core and its origin (thermal or chemical) and 3. possibility on the radiogenic heat source in Earth's core.

Attendance type

Virtual presentation

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