

Intensive course (GEO-DEEP 9200)

Deep Earth and planetary materials and dynamics



Course week in Oslo: **May 8-13, 2017**

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

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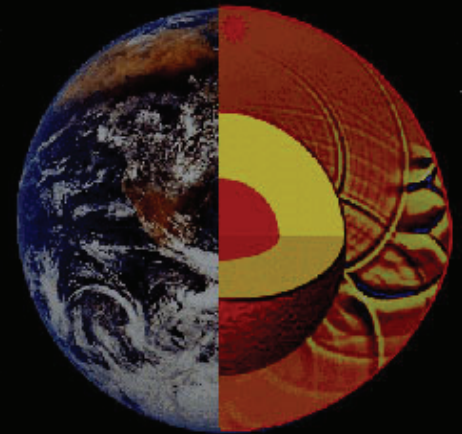
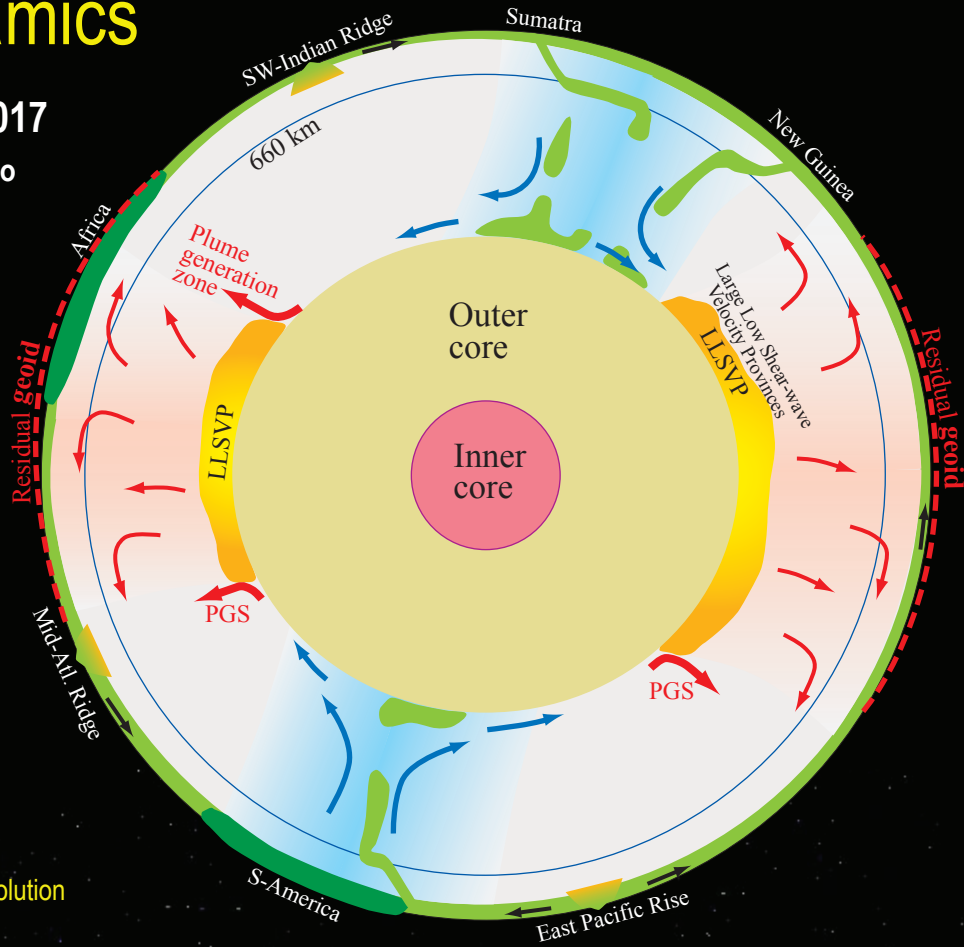
Registration deadline: Febr. 15

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5 ECTS, based on attendance, 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



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