## LUCKY #13: International Workshop on Modelling of Mantle and Lithosphere Dynamics

31 August - 5 September 2013 | Hønefoss, Norway



## PS 2 Linking surface and deep processes

Barry et al. Can variations in radial viscosity explain the persistence of Indian MORB

mantle in the shallow-most asthenosphere over 100's millions of years?

Bull et al. The Effect of Plate Motions on the Longevity of Deep Mantle

Heterogeneities

**Davies** Global Heat Flow Map

Doubrovine TBA

Flament et al. Global models of mantle flow and lithospheric stretching since the Jurassic Kaislaniemi et al.

Sub-lithospheric small scale convection - a mechanism for continental

collision magmatism

Li et al. Effects of a low viscosity post-perovskite on the stability and structures of

the primordial dense reservoirs in the lower mantle

Mulyukova el al. Numerical Modeling of Deep Mantle Flow: Thermochemical Convection and

Entrainment

Nakagawa & Tackley A coupled thermo-chemical evolution of Earth's mantle and core: Effects of

a three-component mantle dynamics

Temporal variation of the geoid and dynamic topography inferred from Shahraki & Schmeling

geodynamics modeling

Shahraki & Schmeling Effects of Post-perovskite phase change on the observed geoid

Steinberger et al. Possible links between subduction history, generation of of mantle plumes,

true polar wander, core-mantle-boundary heat flux and core processes

Tackley Evolution of mantle convection and plate tectonics from a hot/molten initial

state on Earth and super-Earths

Numerical models on thermal and rheological sensitivity of deformation Fuchs et al.

pattern at the lithosphere-asthenosphere boundary

Golabek et al. Towards coupled giant impact and long term interior evolution models

Plesa et al. How can we constrain the amount of heat producing elements in the interior

of Mars?

Rolf et al. The timescales of continental drift controlled by the strength of the

lithosphere?

Rozel & Tackley Internal temperature and heat flux in a super-Earth

Torsvik et al. Linking mantle dynamics to plate tectonics

Trønnes et al. Chemical geodynamics of the NE Atlantic and Arctic mantle

The earliest evolution of Moon, Mars and Mercury - How old are their oldest Werner

surfaces?