



**Dynamic topography: a key surface record of deep Earth processes
1-2 September 2011, Burlington House, London**

Scientific Programme

Thursday 1st September

0845-0900 **Welcome & Introduction**

Chair: Michael Kendal

0900-0940 **Trond Torsvik** *Keynote*

Mantle dynamics: linking surface and deep processes

0940-1000 **Carolina Lithgow-Bertelloni** *Invited*

Dynamic topography: fact or fiction?

1000-1020 **Sierd Cloetingh** *Invited*

TOPO-EUROPE: An integrated solid earth approach to continental topography and deep Earth-surface processes in 4D

1020-1040 **Nicky White** *Invited*

Accurate measurement of dynamic topography through space and time

1040-1120 **Coffee Break**

1120-1140 **Rebecca Flowers** *Invited*

Testing mantle dynamic models from thermochronology constraints on the rise and fall of continental interiors

1140-1200 **Romain Beucher**

Resolving timing on dynamic topography: How thermochronology can help?

1200-1220 **Robert Moucha** *Invited*

The role of mantle convection in African long-term erosion and sediment transport

1220-1240 **Jonathan Paul**

Spatial and temporal evolution of Cenozoic dynamic support of Madagascar and Africa

1240-1300 **Liran Goren**

Modeling rivers and river basins as indicators of tectonic surface deformation and uplift

1300-1400 **Sandwich Lunch Provided**

Chair: Stewart Fishwick

1400-1420 **Christelle Loiselet**

Coupled modelling to study the interaction between passive margin extension and sedimentary basins processes.

1420-1440 **Gareth Roberts**

Temporal and spatial pattern of dynamic topography of Western North America from river profile inversion

1440-1500 **Jean Braun** *Invited*

Eroding dynamic topography at a range of scales

1500-1520 **Ricardo Ramalho**

Using island freeboard to track dynamic topography on the Cape Verde hotspot archipelago

1520-1600 **Coffee Break**

1600-1620 **Reiner Rummel** *Invited*

Satellite gravimetry with GOCE

1620-1640 **Tony Watts** *Invited*

Plate flexure and dynamic topography

1640-1700 **Søren Nielsen** *Invited*

Topography along the North Atlantic margins: deep or shallow origin?

1700-1720 **Ross Hartley**

Transient convective uplift at the fringes of the North Atlantic Ocean

1720-1740 **Ross Parnell-Turner**

Dynamic topography of the North Atlantic Ocean through space and time

1740-2000 **Wine Reception & Posters**

Posters

1740-2000 **Emerson Marfisi**

Upper Miocene – Pleistocene tectonostratigraphic evolution of the North Island of New Zealand

1740-2000 **Grace Shepherd**

Linking deep-mantle slab sinking to dynamic topography across South America

1740-2000 **Benjamin Guillaume**

Freeboard, sea level and dynamic topography during aggregation and break-up of a supercontinent

1740-2000 **Juan-Luis Valera**

Dynamic topography resulting from asymmetric foundering of a dense root: the case of Sierra Nevada, California.

- 1740-2000 **Victor Sacek**
Quantifying surface processes due to the impact of a thermal anomaly at the base of a moving lithosphere: uplift of divergent margins
- 1740-2000 **Peter Webb**
Time varying dynamic topography from mantle circulation models
- 1740-2000 **Logan Yeo**
Global paleogeographic datasets to ground-truth dynamic topography models
- 1740-2000 **Shunji Ouchi**
Development of experimental landform and the effect of uplift rate

Friday 2nd September

Chair: Gregory Houseman

- 0900-0940 **Michael Gurnis** *Keynote*
Interpreting sea level and stratigraphic records over long time-scales on a dynamic Earth
- 0940-1000 **Huw Davies**
Predicted dynamic topography since Mesozoic
- 1000-1020 **Louis Moresi** *Invited*
Dynamic topography seen through the lens of a non-linear lithosphere
- 1020-1040 **Rhodri Davies**
Constraining the origin of Earth's lower mantle seismic signature

1040-1110 **Coffee Break**

- 1110-1150 **Alessandro Forte** *Keynote*
Global mantle convection dynamics and Earth's surface topography
- 1150-1210 **Hans-Peter Bunge** *Invited*
Paleo Earth: Reconstructing past deep Earth structure and dynamics
- 1210-1230 **Evgueni Burov** *Invited*
Small-scale features of the dynamic topography unveiled by tectonically realistic numerical models of mantle-lithosphere interactions
- 1230-1250 **Aedon Talsma**
Kinematically driven models of dynamic topography

1250-1350 **Sandwich Lunch Provided**

Chair: Roderick Brown

- 1350-1410 **Harro Schmeling**
A benchmark comparison of numerical surface topography calculations in geodynamic modelling

1410-1430 **Claudio Faccenna**

Topography of the Mediterranean: looking for small-scale dynamic signals

1430-1450 **Andrew Bottrill**

Can dynamic surface topography at continental collision zones be used to detect slab break off?

1450-1510 **Karol Czarnota**

Spatial and temporal variation of dynamic drawdown of the Northwest Shelf of Australia

1510-1540 **Coffee**

1540-1600 **Ivone Jimenez-Munt**

Decoupled crust-mantle accommodation of Africa-Eurasia convergence in the NW-Moroccan margin: Evidences for dynamically supported topography

1600-1620 **Ferenc Horvath**

Dynamic subsidence and uplift history of the Pannonian backarc basin

1620-1640 **Federico Davila**

Dynamic topography in the Argentine Pampas

1640-1700 **Oguz Gogus**

Evolution of the lithosphere beneath the western Anatolia-Aegean sea region: reconciling geodynamic modeling with geological and geophysical constraints

1700-1715 **Thanks & Closing Remarks**