



# GEODYNAMIK WORKSHOP 2008 PROGRAM

Neustadt an der Weinstraße  
from 30.09.2008 until 02.10.2008

## Tuesday, Sept. 30, 2008

Arrival after 17:00

18.00 *Dinner*

*Afterwards, Ice breaker in the Pfalz Keller of the Kloster*

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## Wednesday, Oct. 1, 2008

08:00 *Breakfast*

**Welcoming**

**09:00 until 10:20**

**Morning Oral Session**

*Core related Dynamics*

- J. Ernst-Hullermann *Precession driven dynamo*
- A. Möller *Influence of rotation on iron and silicate particles in an early Magma Ocean*
- M. Breuer *A numerical study on possible driving mechanisms of core convection*
- R. Ziethe *Planet Formation and Differentiation: A Link between Monte--Carlo Simulations and Computational Fluid Dynamics*

10:20 *Coffee break*

**10:35 until 12:00**

**Morning Poster Session**

12:30 *Lunch*

**14:00 until 15:20**

**Afternoon Oral Session**

*Mantle related Dynamics*

- L. Schumacher *Mantle convection modeling with depth-dependent viscosity –Effects on the convective planform and plume behavior*
- P. Tackley *Modelling Compressible Mantle Convection with Large Viscosity Contrasts in a Three-Dimensional Spherical Shell Using the Yin-Yang Grid*
- J. Hasenclever *3D numerical modeling of ridge-transform faults using a newly developed multigrid finite element code written in MATLAB*

- C. Hüttig *Scaling of temperature- and pressure-dependent viscosity convection*

**15:20-16:00** *Coffee break*

- B. Futterer *GeoFlow: First Results of Thermal Convection Experiment on ISS*
- A. Scurtu *GeoFlow as Thermal Convection Experiment for Modelling Mantle Dynamics*
- M. Ballmer *Non-hotspot volcano chains originating from small-scale sublithospheric convection*

**17:00 until 18:30** **Afternoon Poster Session**

**18:30** *Dinner*

**19:30** **Thematic Group discussions in the Pfalz Keller**

## Thursday Oct 2, 2008

**08:00** *Breakfast*

**09:00 until 11:00** **Morning Oral Session**

*Lithosphere related Dynamics*

- U. Hansen *Dynamical Mechanisms Behind Periodic and Episodic Phenomena in the Earth's Interior*
- I. Löw *Dynamics of subduction under an active Margin: Effects of rheological weakening by fluids and melts Numerical Modelling*
- W. Jacoby *Plumes, the Lower Mantle and Gravity Anomalies*
- V. Klemann *Glacial isostasy and plate motion*

**10:20-10:40** *Coffee break*

- B. Kaus *Insights on the strength of the continental lithosphere from quasi-instantaneous lithospheric models*

**11:00 until 12:00** **Morning Poster Session**

**12:30** *Lunch*

**14:00 until 15:20** **Afternoon Oral Session**

*Miscellaneous*

- G. Richard *Numerical modeling of two-phase flow in geodynamics: State of the art, benchmark and perspectives*
- A. Fahl *The effect of resurfacing events on dynamic topography of the surface*
- A. Ismail-Zadeh *Numerical techniques for solving the inverse retrospective problem of mantle dynamics*
- H. Schmeling *The role of melting in continental break up, ocean formation and plume-rift interaction*

**15:20** *Coffee break, Poster Session, Discussion*

**16:30** **Departure**