

Registration

Deadline for registration: November 17th 2017

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Participation is free of charge

Organization

Hauke Marquardt is a mineral physicist and head of the Emmy Noether Group „GeoMaX“ funded by the German Science Foundation (DFG). Since 2016 he is member of the Young Scholars' Program of the Bavarian Academy of Sciences and Humanities.
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Co-sponsor

Deutsche Forschungsgemeinschaft



BADW

Mantle Dynamics and Deep Earth Material Cycles

Workshop

20/11/17

9.30 AM – 17.00 PM

BAVARIAN ACADEMY OF SCIENCES AND HUMANITIES

Alfons-Goppel-Straße 11 (Residenz)
80539 München; Sitzungssaal 1, first floor
Phone +49 89 23031-0; www.badw.de

DIRECTIONS

U3/U6, U4/U5 Odeonsplatz
Tram 19 Nationaltheater
No car park available

Junges Kolleg



Bayerische
Akademie der Wissenschaften

Program

- 9.30 am **Introduction**
DR. HAUKE MARQUARDT (BGI Bayreuth)
- 9.45 am **Seismic imaging of mantle convection**
DR. STEPHANIE DURAND
(Universität Münster)
- 10.15 am **The seismic signature of high-resolution mantle circulation models**
DR. BERNHARD SCHUBERTH
(LMU München)
- 10.45 am **Coffee break**
- 11.15 am **The preservation of large-scale heterogeneity in Earth's mantle**
DR. MAXIM BALLMER (ETH Zürich)
- 11.45 am **Mineral scale modelling of two-phase deformation**
DR. MARCEL THIELMANN (BGI Bayreuth)
- 12.15 pm **Lunch Break**
- 14.15 pm **Deformation of lower mantle phases and analogs**
PROF. LOWELL MIYAGI (University of Utah)
- 14.45 pm **Experimental deformation of (Mg,Fe)O at lower mantle P/T-conditions**
JULIA IMMOOR (BGI Bayreuth)
- 15.00 pm **Experiments and EVPSC on two-phase aggregates**
DR. NADEGE HILAIRET (Université Lille)
- 15.30 pm **Coffee Break**

- 16.00 pm **Three-axis presses: The path towards higher pressure, lower strain rates, and larger volumes**
DR. NICOLAS WALTE
(Heinz Maier-Leibnitz Zentrum München)
- 16.15 pm **Role of grain boundaries for mantle deformation**
FILIPPE FERREIRA
(BGI Bayreuth)
- 16.30 pm **Seismic structure imaged with off plane signals and its implications to mantle dynamics**
LINA SCHUMACHER
(Universität Münster)
- 16.45 pm **Discussion, Farewell**

Mantle Dynamics and Deep Earth Material Cycles

Convective material flow in Earth's mantle drives plate tectonic processes and generates a material exchange between deep mantle reservoirs and Earth's surface and atmosphere over geologic time. This workshop will bring together researchers with expertise in different Earth Science disciplines, including observational geophysics, numerical modelling, and experiments, to discuss current concepts on dynamic processes occurring in the mantle and associated material cycles. A focus will be on the effects of multi-phase deformation and strain localization.