



# Geowissenschaftliches Kolloquium

## *Modelling continental crust formation on Archean Earth*

Donnerstag, 3. Mai 2018 - 16.15 Uhr

**Gregor Golabek**

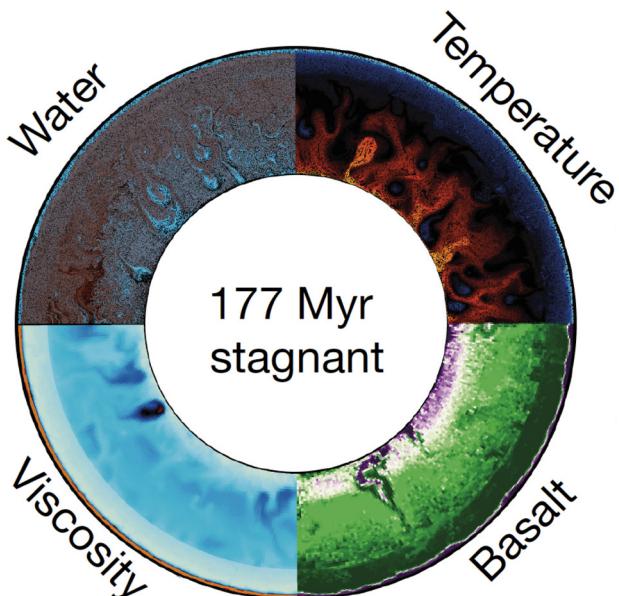
Universität Bayreuth

Here we investigate the creation of primordial TTG-like continental crust using self-consistent numerical models of global thermochemical convection associated with magmatic processes. We show that the volcanism-dominated heat-pipe tectonics model results in cold crustal geotherms and is not able to produce Earth-like primordial continental crust. In contrast, the Plutonic squishy lid tectonics regime dominated by intrusive magmatism results in hotter crustal geotherms and is capable of reproducing the observed proportions of various TTG rocks.



### Curriculum vitae (selection):

- |             |  |
|-------------|--|
| Since 2015  | Associate Professor, Bayerisches Geoinstitut     |
| 2013 - 2015 | Senior Researcher, ETH Zurich                    |
| 2012        | Researcher, ETH Zurich                           |
| 2011 - 2012 | Post Doc, École Normale Supérieure, Lyon, France |
| 2010        | Ph. D., Zurich                                   |



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