



# GEODYNAMICS @ GRAZ

(Working Group Stüwe)

## Annual Report 2016

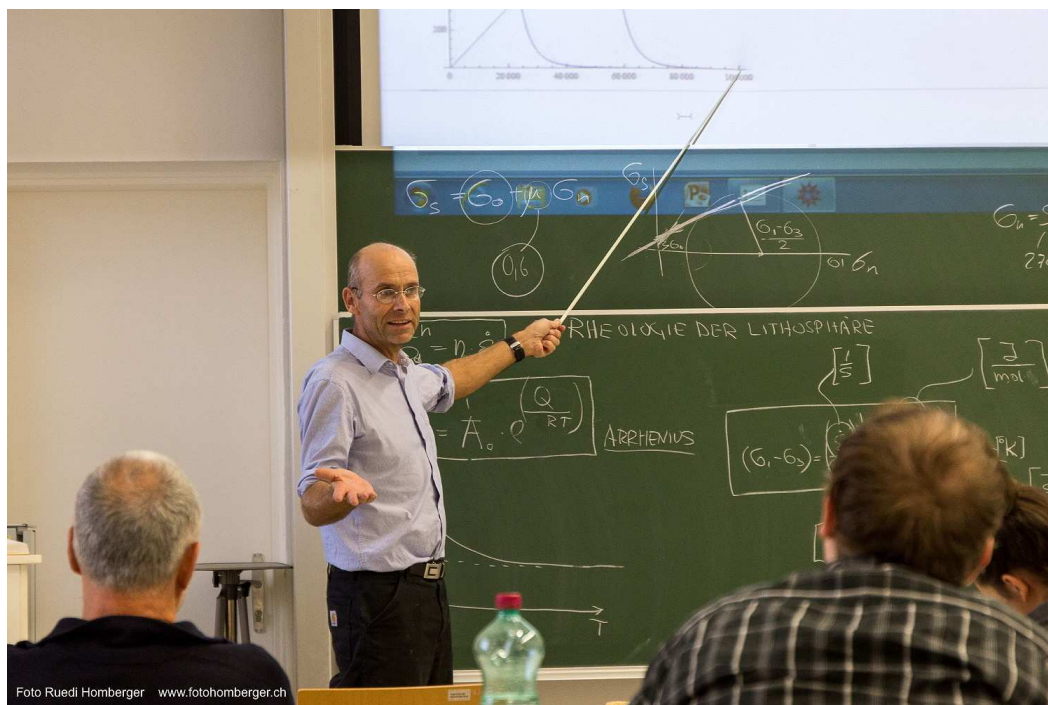


Foto Ruedi Homberger www.fotohomberger.ch

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## GROUP MEMBERS

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### PhD students:

**Syed Ali Turab** (PhD student)  
*Interest:* Uplift history of passive margins  
*Funded by:* self supported by Pakistan Higher Education commission (graduated 16.12.2016)

### Masters Students:

**Sebastian Wiesmayr** (MSc student)  
*Interest:* Geological studies of stone age monuments in Styria

**Christoph Pucher** (MSc student)  
*Interest:* Morphology of Nil catchment Messinian crisis  
Started thesis work at end of 2015

**Thorsten Bartosch** (MSc student)  
*Interest:* Neotectonics of Nock gebiet  
Started at the end of 2015

**Alexandra Herg** (MSc student)  
*Interest:* Metamorphism in the Plankogel series and Pohorje  
Started at the end of 2015

Disappeared MSc students:

**Felix Rauschenb.** (MSc student)  
**Thomas Nigl** (MSc student)  
**Angela Brand** (MSc student)

## SCIENTIFIC PUBLICATIONS

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### Articles in refereed journals:

- Schorn S., Stüwe K., (2016) The Plankogel detachment of the Eastern Alps: petrological evidence for an orogen-scale extraction fault. *Journal of Metamorphic geology*, 34, 147-166.
- Hassan M., Abu-Alam T., Hauzenberger C., Stüwe K., (2016) Geochemical signature variation of pre-, syn-, and post-shearing intrusives within the Najd Fault System of western Saudi Arabia. *Lithos*, v.263, p. 274 – 291.
- Dixon, J. L., von Blanckenburg, F., Stüwe, K., and Christl, M., (2016) Glaciation's topographic control on Holocene erosion at the eastern edge of the Alps, *Earth Surf. Dynam.*, 4, 895-909, doi:10.5194/esurf-4-895-2016, 2016.

### Abstracts and conference presentations with publication year 2016:

- Stüwe K., Pucher C., Robl J., Hergarten S. (2016) Quantifying Knick Point Migration Rates Related to the Messinian Crisis. The Case of the Nile River. EGU2016-9028 (Talk)
- Turab S. A., Stüwe K., Sturat F., Chew D.M., (2016) An integrated approach to study the exhumation of rocks in Neelum valley, NW Himalayas, Pakistan. EGU2016-4788 (Poster)
- Schorn S., Stüwe K., (2016) The Plankogel detachment of the Eastern Alps: petrological evidence for an orogen-scale extraction fault. EGU2016-9017
- Stüwe K., Bartosch T., (2016) Influence of strike slip fault activity on the topographic evolution of the eastern Alps. GSA, Denver, Paper No. 304-8
- Turab S.A., Stüwe K., Stuart F.M., Chew D.N., Cogne N., (2016) Constraining lift and erosion in the western Himalayan syntaxis. A multiple thermochronometric study from the Neelum river region, NW Himalaya, Pakistan. 15<sup>th</sup> International Conference on Thermochronology, 18-23, September Maresias, Brazil.
- Stüwe K., Homberger R., (2016) The Geology of the Alps from the Air – Presenting an Online Catalogue of Oblique Aerial Photography 26<sup>th</sup> GSSL Conference February Colombo/ Sri Lanka

### Public Relations Articles, Talks and Activities:

- Tzivanopoulos K., Stein-Zeiten Unizeit 1/2016 Artikel über Afrika Forschungsn Stüwe
- Stüwe K. (8.10. 2016) Geologie der Alpen von Oben . (Schloss Trautenfels Vortrag zur ausstellung)
- Stüwe K. (15.7.2016) Grönland. Geburtsort der Polargebiets Geologie. (Vortrag zum Anlass des Müller Symposium München)
- Stüwe K. (2016) Das Alter der Alpen (populärwissenschaftliche Vortragsserie und Exkursionen bis März am Wilden Kaiser für Mercedes).
- Various editorial activities for LITHOSPHERE and GSA at GSA Denver (October)

**Exhibitions:**

- Ausstellung “Landschaft ist Bewegung” Universalmuseum Joanneum (19.3.16-31.10.16) Kuratiert von Frotz I., with Photos of Stüwe & Homberger R.



Figure 1: Left: Folder of the exhibition in SchloßTrautenfels. Right: PR Article in UniZeit on Africa project.

**FIELD TRIPS AND CONFERENCE TRAVEL**

- EGU
- Greenland trip with Red Bull
- Denver GSA conference
- Several Trips to Wild Kaiser with Mercedes.

## 4. TEACHING AND EDITING ACTIVITIES

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### EDITORIAL RESPONSIBILITIES

- Lecture Notes in Earth Science (Springer) (Chief Editor)
- Mitteil. des Naturwiss. Vereins für Steiermark (Editor: Earth Sci.)
- Lithosphere (Science editor)

### EDITORIAL BOARD MEMBERSHIPS

- Journal of Metamorphic Geology (editorial board member)
- Journal of the Virtual Explorer (editorial board member)
- Journal of Asian Earth Science (editorial board member)
- Austrian Journal of Earth Science (editorial board member)

### EDITED JOURNAL VOLUMES

- Drescher A., and Stüwe K., 2016 (eds.) Mitteilungen des Naturwissenschaftlichen Vereins für Steiermark, vol., 147, 112 p.



**Figure 2:** Cover of this years Mitteilungen of the Naturwissenschaftliche Verein für Steiermark.





**Figure 3:** Top left: Our start students in petrology of 2016: Dominik Sorger, Philip Schantl and Simon Schorn. Top right: Prof. Fin Stuart and PhD student Syed Turab discuss on the coffee table in the department. Bottom left: Kurt Stüwe, Stefan Hergarten and Jörg Robl at EGU. Bottom right: Fin Stuart, Syed Turab and Kurt Stüwe at the PhD defense of Syed Turab.





**Figure 3:** Department outing to Koralpe, With Gerald Salmina, Alex Zika and Axel Naglich in Greenland. Student field trip to Geopark Glashütten, With Alex Huber and others at Wilde Kaiser. Verein Pro Mölltal meeting in Heiligenblut.