

## Instructors of the Summer School

apl. Professor Dr. Martin H. Trauth  
University of Potsdam

together with

Prof. Dr. Asfawossen Asrat  
U Addis Ababa, Ethiopia

Dr. Nadine Berner  
Gesellschaft für Anlagen- und  
Reaktorsicherheit (GRS) gGmbH,  
Germany

Prof. Dr. Bodo Bookhagen  
U Potsdam, Germany, and  
UC Santa Barbara, USA

Prof. Dr. Ekkehard Holzbecher  
German U of Technology, Oman

Dr. Verena Foerster  
U Köln, Germany

Prof. Dr. Mark Maslin  
University College London, UK

Prof. Dr. Jens Tronicke  
U Potsdam, Germany

Dr. Wolfgang Schwanghart  
U Potsdam, Germany

Dr. Gerold Zeilinger  
U Potsdam, Germany

## Requirements and Applications

Participants will be selected by the director and the instructors of this program. Applicants are required to hold an M.Sc. degree (or equivalent) in geosciences in a broad sense, including environmental-oriented biology, chemistry and physics, and to be currently participating in a doctoral program at an internationally recognised university.

The summer school fellowship covers all costs for transportation, accommodation and meals during the summer school. Full or partial support for travel expenses to/from Potsdam will be granted according to necessity. The fellowship does not cover, though these things are necessary for participation, costs for (1) a computer laptop, (2) hiking boots and clothing, and (3) insurance and medical costs. No daily allowance will be paid.

Applications should submit a covering letter, a single-page statement of the applicant's motivation for participating in the summer school, a letter of recommendation from the applicant's doctoral supervisor, and a copy of the master's certificate. Please send your full application, as a single PDF file, by email to the director of the summer school before 1 October 2017:

apl. Professor Dr. Martin H. Trauth  
Erd- und Umweltwissenschaften  
Universität Potsdam  
Karl-Liebknecht-Strasse 24-25  
D-14476 Potsdam, Germany

Email: [esd2018@geo.uni-potsdam.de](mailto:esd2018@geo.uni-potsdam.de)

Summer School on

# Earth Surface Dynamics

## Understanding Processes at the Earth's Vulnerable Skin

25 May–10 June 2018  
12 August–2 September 2018

University of Potsdam, Germany

Summer School on

## Earth Surface Dynamics

Understanding Processes at the Earth's Vulnerable Skin

2018

We are pleased to announce two fully sponsored consecutive summer school sessions for 25 doctoral students from geosciences, environmental sciences and related fields such as biology, chemistry and physics.

These summer schools will be designed for doctoral students, aiming (1) to improve their skills to understand the complex interaction of the processes shaping the Earth's surface at different temporal and spatial scales, (2) to monitor, model and predict the results of these interactions, and (3) to identify and mitigate risks of natural and human-caused interference in these processes in an interdisciplinary and intercultural environment.

The two summer schools each comprise three modules with each module covering a week, taking place at different locations in Germany. These locations are representative of typical settings for Earth surface processes, from the coast to lowlands and from continental rifts to high mountains.

The **FIRST SET OF MODULES** will focus on types of signals and noise commonly encountered at the Earth's surface, and methods of acquiring, processing and analyzing data with non-destructive physical surveying methods. The **SECOND SET OF MODULES** will be about the examination and modeling of the processes underlying the data collected at the Earth's surface.

The intense, multifaceted science training program of the summer school will help participants to acquire knowledge and understanding of the processes shaping the Earth's vulnerable skin and to define premier research topics to study processes at the Earth's dynamic surface.

Participants in the summer school are expected to form part of a new generation of researchers, practitioners and lecturers with the necessary background and scientific tools to evaluate and mitigate the effects of present-day and future environmental change.

### Session 1 | 25 May–10 Jun 2018

[Signals and Noise at the Earth's Surface](#)  
20–27 May 2018 | apl. Professor Trauth,  
Doctor Berner

[Exploring the Shallow Subsurface of the Earth](#)  
27 May–3 Jun 2018 | Professor Tronicke

[Remote Sensing of Earth Surface Processes](#)  
3–10 Jun 2018 | Professor Bookhagen

### Session 2 | 12 Aug–2 Sep 2018

[Modeling of Surface and Subsurface Processes](#)  
12–19 Aug 2018 | Professor Holzbecher

[Geoinformation Systems of the Earth's Surface](#)  
19–26 Aug 2018 | Doctor Zeilinger

[Extreme Events, Geohazards and Georisk](#)  
26 Aug–2 Sep 2018 | Doctor Schwanghart

### During Sessions 1 and 2

[Communicating Science](#)  
Doctor Foerster, Professor Asrat, Professor Maslin

[Earth Surface Processes Field Excursions](#)  
All instructors