Instructors of the Summer School

apl. Prof. Dr. Martin H. Trauth
U Potsdam, Germany

together with

Prof. Dr. Asfawossen Asrat
U Addis Ababa, Ethiopia

Dr. Nadine Berner
GRS gGmbH, Germany

Dr. Zuze Dulanya
U Malawi, Malawi

Walter Düsing, MSc
U Potsdam, Germany

Dr. habil. Georg Feulner
PIK, Germany

Dr. Verena Foerster
U Köln, Germany

Dr. Stefanie Kaboth-Bahr
U Potsdam, Germany

K. Hauke Krämer, Exam. Phys.
PIK, Germany

Dr. habil. Norbert Marwan
PIK, Germany

Prof. Dr. Mark Maslin, FRGS, FRSA
University College London, UK

Dr. Manfred Mudelsee
Climate Risk Analysis, Germany

Jutta Müller, Dipl.-Betriebsw. (FH)
Freelance journalist, Germany

Prof. Dr. Frank Schäbitz
U Köln, Germany

Dr. Mathew Stiller-Reeve
Climate Dialogue Consultancy, Norway

Requirements and Applications

Participants will be selected by the instructors of this program.

Applicants are required to hold an MSc degree (or equivalent) and to be currently participating in a doctoral program at an internationally recognized university.

Applications should include 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 supervisor, along with a CV and a copy of the master's degree.

Please send your full application, as a single PDF file, by email to apl. Prof. Dr. Martin H. Trauth (trauth@uni-potsdam.de) before 1 December 2020.

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Universität Potsdam

VolkswagenStiftung

Online Summer School on

Trends, Rhythms and Events in the Earth's Climate System

Past, Present and Future

23 May–13 Jun 2021
22 Aug–12 Sep 2021

University of Potsdam, Germany

VolkswagenStiftung

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2021

We are pleased to announce two fully sponsored consecutive online summer schools for 40 doctoral students from the fields of geology, geophysics, geoecology, meteorology and environmental-oriented biology, chemistry and physics.

These interdisciplinary summer schools will be designed for doctoral students, aiming (1) to improve their skills to understand the complex interaction of the processes in the Earth's climate system, (2) to acquire knowledge in state-of-the-art methods of climate time series analysis, (3) to interpret the results of their analysis of past, present and future climate change, including the associated uncertainties, as well as (4) to identify, predict and communicate the impacts of natural and human-caused climate change in an interdisciplinary and intercultural environment, taught by a team of experienced lecturers and researchers.

During each of the weeks of the summer schools, 2–5 instructors will be available to contribute to the lectures, demonstrations, discussions and group works. Furthermore, the instructors are invited, similar to the participants, to give 12–15 minute conference-style presentations about their current research in the field of climate change.

Each week of the summer schools includes five weekdays (Monday–Friday) of lectures, exercises and demonstrations in the morning, and group work in the afternoon. At the end of the afternoon there is room to discuss the results of the progressing group work in short presentations.

The first set of Modules 1–3 will focus on the dynamics of the Earth's climate system, the fundamentals of climate time series analysis and the consideration of uncertainties in climate data. The second set of Modules 4–6 will be about advanced methods of climate time series analysis as well as the impacts of climate change. The cross-thematic Modules 7+8 are about visible traces and effects of climate change as observed in the field and about communicating climate change to non-experts such as decision makers and the public.

Participants in the summer school are expected to form part of a new generation of researchers that is well-equipped with the necessary knowledge and tools to assess and mitigate current and future environmental changes.

Session 1 | 23 May–13 Jun 2021

1 Climate Dynamics, Past and Present

23–30 May 2021 | Maslin, Kaboth-Bahr

2 Fundamentals of Climate Time Series Analysis

30 May–6 Jun 2021 | Trauth, Düsing

3 Uncertainty of Climate Data Across Scales

6–13 Jun 2021 | Berner, N.N.

Session 2 | 22 Aug–12 Sep 2021

4 Extreme Events in Climate Time Series

22–29 Aug 2021 | Mudelsee, N.N.

5 Complex Systems, Recurrence and Networks in Climate

29 Aug–5 Sep 2021 | Marwan, Krämer

6 The Impacts of Climate Change

5–12 Sep 2021 | Feulner, Asrat

During Sessions 1 and 2

7 Visible Traces and Effects of Climate Change

Trauth, Foerster, Dulanya, Schäbitz, Müller

8 Communicating Climate Change

Foerster, Dulanya, Schäbitz, Stiller-Reeve