







## International Summer School on Climate change in the Baltic Sea region

co-organized by Leibniz Institute for Baltic Sea Research Warnemünde and University of Rostock and the International Baltic Earth Secretariat at Helmholtz-Zentrum Geesthacht under the umbrella of Baltic Earth

# Askö Laboratory Trosa, Sweden 26 August - 2 September 2019



#### Scope

The course will focus on past and future changes in climate in the Baltic Sea region. Students will be introduced to fundamental processes of the atmosphere, ocean, sea-ice and land surface with relevance for the climate system. We will start from basic principles and equations of motion that describe the circulation and dynamics in the atmosphere, ocean

and sea-ice. Further basic methods of the analysis and modeling of the regional climate system will be introduced, including the statistical analysis of time series to identify changes in regional climate.

Furthermore, the course will deal with coupled atmosphere-ocean climate models, climate change, the greenhouse gas effect and other drivers of regional climate, dynamical downscaling, and the variability of circulation and regional climate. We will also study the possible impact of climate change on the marine ecosystem including biogeochemical cycles. A holistic Earth System approach will be presented although the main focus of the course is on the physical aspects of changing climate.

#### **Application Deadline**

### 1 May 2019

Find all relevant information at

www.baltic.earth/summerschool2019/

#### Who organizes the course?

The course is co-organized by Leibniz Institute for Baltic Sea Research Warnemünde, the University of Rostock and the International Baltic Earth Secretariat at Helmholtz-Zentrum Geesthacht under the umbrella of Baltic Earth (<a href="www.baltic.earth">www.baltic.earth</a>).

#### Who is eligible?

Accommodation and all meals are provided free of charge on Askö. Travel costs will not be reimbursed but limited funds are available and applications for travel support are welcome together with your application (please add a brief motivation).