





### **International Summer School on**

# Climate change in the Baltic Sea region

co-organized by Baltic Earth, Stockholm University Baltic Sea Centre, Leibniz Institute for Baltic Sea Research Warnemünde and University of Rostock

# Askö Laboratory Trosa, Sweden

29 August - 5 September 2016

#### 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 June 2016

Find all relevant information at

www.baltic.earth/summerschool2016

#### Who organizes the course?

The course is co-organized by Baltic Earth, Stockholm University Baltic Sea Centre and Leibniz Institute for Baltic Sea Research Warnemünde.

#### Who is eligible?

Master or PhD students in marine sciences and associated fields from all Baltic Sea countries can apply. Accepted applicants will be payed travel, accomodation, food and course materials.