International Summer School on Climate change in the Baltic Sea region

Askö Laboratory, Trosa, Sweden, 29 August – 5 September 2016

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

Course agenda (arrival on Askö 11:00 on Monday, departure 10:00 on Monday):

Day	Monday 29/8	Tuesday 30/8	Wednesday 31/8	Thursday 1/9	Friday 2/9	Saturday 3/9	Sunday 4/9
General topic	Course introduction, student presentations	Fundamental processes in the climate system, air-sea-wave interaction	Climate modeling, climate variability over the Baltic Sea and North Sea regions, land-sea interaction, carbon cycle	Regional oceanography, past climate variability of the Baltic Sea	Dynamical downscaling, land surface modeling, climate impacts on marine biogeochemical cycle	Hypoxia, science communication	Examination, students' group presentation, resumé
Speaker/title Morning session 09:00-10:30 (2 x 45 min)	Travel to Askö	Semjon Schimanke: Climate state and global circulation patterns in the troposphere and stratosphere	Markus Meier: Large-scale ocean circulation	Markus Meier: Physical Oceanography of the Baltic Sea and other regional seas, part I	Markus Meier: Regional climate system modeling – reconstruction of past climate and future projections	Markus Meier: Climate impacts on marine biogeochemical cycles, part II and exercises	10:00 Examination (45 minutes)
Break 10:30-11:00							
11:00-12:30 (2 x 45 min)	Markus Meier: Course introduction and fundamental processes of the climate system	Anna Rutgersson: Air-sea-wave interaction	Markus Meier: Climate Modeling – The global and regional perspective	Markus Meier: Physical Oceanography of the Baltic Sea and other regional seas, part II	Ben Smith: Land surface dynamics and land-sea interactions under global change.	Dan Conley: Hypoxia in the Baltic Sea	11:00 Tutorials and exercises: sea ice modeling
Lunch 12:30-14:00							
Speaker/title Afternoon session: 14:00-15:30 (2 x 45 min)	Short student presentations of their thesis work (5 min. each)	Tutorials and exercises	Excursion to the research vessel "Electra"	Tutorials and exercises ("run your own global climate model")	Group work	Group work	Students' group presentations, resumé of the school
Break 15:30-16:00							
16:00-17:30 (2 x 45 min)	Short student presentations of their thesis work (5 min. each)	Semjon Schimanke: Part II	Christoph Humborg: Processes in the Baltic Sea catchment area and eutrophication	Markus Meier: Past changes in extremes over the Baltic Sea and North Sea regions	Markus Meier: Climate impacts on marine biogeochemical cycles, part I	Dan Conley: Science communication	Students' group presentations, resumé of the school
Dinner 17:30-19:30							
Evening session 19:30-21:00 (2 x 45 min)	Social activities	Marcus Reckermann: Baltic Earth – regional Earth system science	Christoph Humborg: Terrestrial and marine carbon cycle	Students' group work	Tutorials and exercises: discussion on trusting climate models and model democracy	Marcus Reckermann: Bad presentation	Social activities