

COP23: Arctic Cluster Side Event

Organisers

Lead organiser: EU-PolarNet and APPLICATE

Other organisers: BLUE-ACTION, ICE-ARC, INTAROS, Nunataryuk, INTERACT

Contact persons: Kristina Bär and Luisa Cristini

Email: kbaer@awi.de; Luisa.Cristini@awi.de

Event

Event title: Polar insights for climate action: Arctic science contributions to implementing the Paris Agreement

Thematic focus: Impact of the EU's investment in Arctic science

Date and time: 15th November, 11:45 - 13:00

Venue: Room 'Brussels' of the EU pavilion (BONN zone – accreditation needed)

Description: Warming at almost twice the global average rate, the Arctic is a key region for understanding wider climate change impacts. Mitigation and adaptation strategies in the Arctic are thus an integral part of the EU's wider efforts to combat climate change and to implement the Paris Agreement. This session will provide up-to-date and policy-relevant information on Arctic change and its global implications, including thawing permafrost, the contribution of melting glaciers and ice sheets on the global sea level, the influence of the Arctic on the global oceans, and changing weather patterns. Participants will also gain insight on the expected impact of the EU's investment in current research projects.

Speakers:

- **Prof Jonathan Bamber** (Moderator), *President of the European Geosciences Union*;
- **Dr Andrea Tilche**, *Head of Unit Climate Action and Earth Observation, DG RTD EC*: [Impact of the EU's investment in Arctic science](#)
- **Prof Thomas Jung**, *Year of Polar Prediction, Alfred Wegener Institute*: [Arctic change and its implications for global weather patterns](#)
- **Dr Jeremy Wilkinson**, *British Antarctic Survey*: [The impacts of Arctic sea ice decline](#)
- **Dr Sebastian H. Mernild**, *Nansen Environmental and Remote Sensing Center*: [Melting glaciers and ice sheets and their impacts on global sea level rise](#)
- **Dr Margareta Johannsson**, *Lund University*: [The consequences of permafrost thaw](#)
- **Dr Dirk Notz**, *MPI Hamburg*: [The influence of the Arctic on the global oceans](#)

Other info: The format of the session includes six 7-minute high-level, keynote presentations on the multi-sector impacts of Arctic change, followed by an open Q & A panel session.

Speaker biographies

Moderator: Jonathan Bamber

Jonathan Bamber is a professor in physical geography and President of the European Geosciences Union. He graduated from Bristol University with a degree in Physics in 1983 and went on to complete a Ph.D at the Scott Polar Research Institute, University of Cambridge, in glaciology and remote sensing. He then spent eight years in the Department of Space and Climate Physics, University College London before returning to Bristol in 1996. His main areas of interest are in applications of remote sensing data in the polar regions. More specifically, he has been working on the use of remote sensing data to elucidate the morphology and dynamics of the Antarctic and Greenland ice sheets. More recently he has begun work on cryosphere-climate interactions and feedbacks through a combined modelling and observational approach.

Dr Andrea Tilche

Andrea Tilche obtained his Doctor Degree in Agricultural Sciences at the University of Milano in 1978. His scientific career was mainly carried out in Italy where he set-up and directed the wastewater treatment laboratories of ENEA in Bologna. In 1998 he moved to the Joint Research Centre of the European Commission as Head of the Water Research Unit, and later to Brussels to lead the Water Key Action in the 5th Framework Programme. Since 2010 he heads the Unit "Climate Action and Earth Observation". He represents the EU at the Intergovernmental Panel on Climate Change and in other international fora.

Prof Thomas Jung

Thomas Jung is an expert in climate analysis, modelling and prediction from the Alfred Wegener Institute (AWI), Helmholtz Centre for Polar and Marine Research in Germany. He has received his PhD in atmospheric physics from the Institute for Marine Research, Kiel, Germany. He then went on to work for 10 years in the research department of the European Centre for Medium-Range Weather Forecasts (ECMWF) in the UK. Prof Jung is head of the Climate Dynamics section at the AWI and full professor for physics of the climate system at the University of Bremen. He is also spokesperson of AWI's research programme and acts as the chair of the Polar Prediction Project of WMO's World Weather Research Programme.

Dr Jeremy Wilkinson

Jeremy Wilkinson is a sea-ice physicist at the British Antarctic Survey, and represents the UK on the International Arctic Science Committee's Marine Working Group, is a member of the UK Arctic and Antarctic Partnership, and sits on the Scientific Steering Group of Antarctic Sea-Ice processes and Climate. Dr Wilkinson is a recognised authority on sea ice and has participated in excess of 20 polar field campaigns. He is presently co-ordinator of the €12 million EU funded ICE-ARC programme, and sits on the Advisory Board for the Japanese Arctic Climate Change Research Project (ArCS).



Dr Margareta Johansson

Margareta Johansson is based at Lund University in Sweden. Margareta has a broad experience in Arctic research, ranging from glaciology/climatology to Arctic ecology and for the last decade she has been focussing on permafrost in a changing climate in northern Sweden. Margareta was a convening lead authors for two chapters (snow and permafrost) of the AMAP SWIPA assessment 2011. She has recently co-lead the terrestrial ecosystem chapter in the Arctic Freshwater Synthesis. Margareta has a great interest in outreach. She is currently the coordinator of an EU Horizon2020 project INTERACT networking 80 research stations in the north (www.eu-interact.org).

Dr Sebastian Mernild

Sebastian H. Mernild is the CEO of the Nansen Environmental and Remote Sensing Center (NERSC) in Bergen, Norway, and a full professor in Climate Change and Glaciology at Western Norway University of Applied Sciences. In 2006 he was awarded a Ph.D. degree in climate change, glaciology, and hydrology from University of Copenhagen, Denmark. His research centers on local, regional, and global modeling using a wide variety of atmospheric and terrestrial models and observations with a specific focus on understanding and simulating climate change interactions related to snow, glacier ice mass-balance (for the Greenland Ice Sheet and mountain glaciers), and freshwater runoff (the water balance components) in Arctic, Antarctic, Patagonia, and the Andes.

Dr Dirk Notz

Dr Dirk Notz is head of the research group "Sea ice in the Earth System" at the Max Planck Institute for Meteorology in Hamburg, Germany. In addition, he is adjunct associate professor at the University Centre in Svalbard, Norway. He obtained his PhD in Applied Mathematics from the University of Cambridge, UK (2006). In his research, he combines insights from field experiments in the Arctic, from laboratory experiments and from modelling work to better understand the role of sea ice for the changing climate of our planet. He is actively involved in the policy and stakeholder dialogue, and has won several prizes for his intelligible presentation of science to the general public.