

IUP/AWI Blockseminar

Theme: Scientific and technological advances in observation and modelling of the atmosphere, ocean, biosphere and cryosphere and their interactions

6 February 2023

University Bremen, NW1, Hörsaal H3

9:30 – 9:55 **Coffee/tea**

9:55 – 10:00 **Welcome**

10:00 – 12:10 **Morning Session**

- Improved CCD tropospheric ozone from S5P TROPOMI satellite data using local cloud fields - Swathi Maratt Satheesan (IUP AG Burrows)
- Connection between arctic ozone and synoptic events - Falco Monsees (IUP AG Burrows)
- Influence of warm air intrusions on satellite sea ice concentrations - Philip Rostosky (IUP AG Notholt)
- 30 min guest talk (online): The Copernicus Sentinel Missions - Claus Zehner (ESA ESRIN)
- Long-term tropospheric aerosol trend over the Arctic observed from space - Linlu Mei (IUP AG Burrows)
- Melt Pond Fraction Derived From Sentinel-2 Data: Bridging From MOSAiC to Arctic-wide Estimates - Hannah Niehaus (IUP AG Notholt)

12:10 – 13:10 **Lunch Break**

13:10 – 14:50 **Afternoon Session 1**

- On the need to observe the ice-covered upper ocean with novel sampling methods - Markus Janout (AWI)
- The ocean hidden beneath the ice: Arctic sea level and surface currents from a satellite perspective - Francesca Doglioni (AWI)
- Overview of AWI Regional/Coastal model : FESOM-C - Ivan Kuznetsov (AWI)
- ESMValTool – analysis and evaluation of Earth system models in CMIP with focus on extreme events - Katja Weigel (IUP AG Eyring)
- Zonal asymmetries in stratospheric ozone trends from satellite limb observations and a chemical transport model - Carlo Arosio (IUP AG Burrows)

14:50:15:10 **Coffee/tea break**

15:10 – 16:50 **Afternoon Session 2**

- Sea Ice Thickness Remote Sensing - Plans and Developments in AWI sea ice physics section - Stefan Hendricks (AWI)
- Arctic sea ice surveys during IceBird campaigns: Overview, results and future activities- Thomas Krumpfen (AWI)
- Anthropogenic CH₄ and CO₂ emissions observed by the MAMAP2D-Light imaging GHG sensor during the CoMet 2.0 Arctic mission in Canada 2022 - Sven Krautwurst (IUP AG Burrows)
- First tropospheric NO₂ results from the GEMS satellite instrument - Andreas Richter (IUP AG Burrows)
- A study on the impact of dynamical downscaling in different pollutant transport scenarios - Alex Poulidis (IUP AG Vrekoussis)