



DFG-SCHWERPUNKTPROGRAMM 1158

ANTARKTIS FORSCHUNG

mit vergleichenden Untersuchungen in arktischen Eisgebieten

Poster

Koordinations-Workshop SPP 1158

(11.-13.09.2022, Universität Bielefeld, Zentrum für interdisziplinäre Forschung,
Methoden 1, 33615 Bielefeld)

Monday, 12. September 2022

1:15 pm - 2:15 pm

Tuesday, 13. September 2022

11:20 am – 12:20 noon

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| <u>S. Arndt</u> (Bremerhaven) | Climate change: A friend or foe for the future Antarctic sea ice mass budget? (fAntasie) |
| <u>S. Berg</u> (Universität zu Köln) | Integrating terrestrial and marine sediment records from East Antarctica to explore late Pleistocene and Holocene ice sheet instability |
| E. Buchta & <u>M. Scheinert</u> (TU Dresden) | Interaction between mass changes of the Antarctic Ice Sheet and solid Earth in Dronning Maud Land, East Antarctica |
| M. Braun & M. Rückamp presented by <u>T. Seehaus</u> (FAU Erlangen-Nürnberg) | Climate sensitivity of western Antarctic Peninsula ice shelves (CSAPIS) |
| J. Feldmann, R. Reese, <u>T. Albrecht</u> (PIK Potsdam), R. Winkelmann & A. Levermann | VAST: Idealized simulations: Shear-margin melt causes stronger transient ice discharge than ice-stream melt |
| S. Henning, R. Weller, L. Ort, J. Lofffield, M. Schumacher, H. Wex & F. Stratmann presented by <u>P. Seifert</u> (TROPOS Leipzig) | Annual Cycle in Antarctic Cloud Condensation (CCN) and Ice Nucleating Particle (INP) Concentrations and Properties at Neumayer Station III |
| <u>C.J. Henry</u> (MPI Meteorologie Hamburg), R. Drews, C. Schannwell, V. Višnjević, I. Koch, H. Spiegel & T. A. Ehlers | Derwael Ice Rise: Comparing 3D modelled stratigraphy and observed internal radar horizons to understand Raymond arch and shear zone evolution |
| <u>H. Herr</u> (Universität Hamburg) | Recovery status and ecology of fin whales at the West Antarctic Peninsula |
| <u>J. Hoffman</u> (Universität Bielefeld) | Understanding host-microbe interactions in a declining Antarctic pinniped |

<u>A. Humbert</u> (AWI-B), T. Schutz, R. Müller	solidFIDEMO - a firn densification model for volumetric mass balances
<u>L. Hüppe</u> (Universität Würzburg), T. Böhler, D. Bahlburg, C. Helfrich-Förster & B. Meyer	Influence of underwater light dynamics on migration patterns of Antarctic Krill in the field
<u>D. Ilicic</u> (IGB / Universität Potsdam) & H.-P. Grossart	Fungal parasites on benthic diatoms in polar waters
<u>L. Istomina</u> (AWI-B), G. Heygster, H. Enomoto, S. Ushio, T. Tamura & C. Haas	Results of the remote sensing retrieval of Antarctic sea ice surface melt during 2017-2022 using Sentinel-3 data
<u>M. Jacob</u> (Universität Bremen), T. Harder & J. Tebben	Recognition, signalling and response of the diatom <i>Fragilariopsis</i> to epibiotic microbial colonization
M. Kappelsberger, M. Horwath, A. Dehghanpour & V. Helm presented by <u>M. Scheinert</u> (TU Dresden)/ <u>Angelika Humbert</u> (AWI Bremerhaven)	Analysis of satellite altimetry over ice to determine the response of the Antarctic Ice Sheet to climate change
B. Koch, M. Hoppema & <u>J. Tebben</u> (AWI-B)	Identifying the carbon that matters: chemical controls on organic matter aggregation (COMA)
<u>M. Kreuzer</u> (PIK Potsdam), W. Huiskamp, T. Albrecht, S. Petri, R. Reese, G. Feulner & R. Winkelmann	HASH: Coupling framework for simulating multi-millennial interactions of the Antarctic Ice Sheet and the global ocean
<u>B. Kutschan</u> (AWI-B), <u>A. Thom</u> (Universität Stuttgart), <u>S. Thoms</u> (AWI-B) & T. Ricken	Modeling of small scale processes in Antarctic sea ice – a coupled bi-scale approach
<u>N.-M. Lešić</u> (MARUM / Universität Bremen), K. Streuff, G. Kuhn, T. von Dobeneck & G. Bohrmann	Holocene depositional environments and associated climate signals archived on the southern shelf of sub-Antarctic South Georgia
<u>H. Link</u> (Universität Rostock), Y. Bodur, F. Säring, D. Seifert & G. Veit-Köhler	Meiofauna matters for seafloor mineralization function
<u>M. Lösing</u> (Universität Kiel), Jörg Ebbing & M. Moorkamp	High-resolution geothermal heat flow model from geophysical joint inversion and machine learning
<u>N. Maaß</u> (Universität Hamburg), M. Nicolaus, L. Rossmann, N. Wever, M. Lehning & M. Jafari	Comparison of snow height buoy measurements with 1D snow cover simulations in the Weddell Sea
A.C. Martínez Rendón, Karin Glaser & <u>Kenneth Dumack</u> (Universität zu Köln)	Algivorous Cercozoa shape the community composition of cryptogamic covers, the dominant vegetation in Polar Regions
<u>JF. Masello</u> (Universität Gießen) & P. Quillfeldt	Foraging and movement ecology of two sympatrically breeding Antarctic storm-petrels
<u>R. M. Mattmüller</u> (Universität Bielefeld / AWI-B), K. Thomisch & I. Van Opzeeland	A guide to marine soundscape metrics
<u>C. Mehlmann</u> (Universität Magdeburg)	A hybrid sea ice model to estimate the impact of floe scale sea ice-ocean-atmosphere coupling on the Antarctic sea ice evolution
A. Paijmans & <u>Joe Hoffman</u> (Universität Bielefeld)	Genomic dissection of climate change impacts on a declining Antarctic top predator population
<u>J. Piontek</u> (IOW Warnemünde), T. Urich & A.-L. Buer	Bacterial transformations of dimethylsulfoniopropionate in the Weddell Sea
<u>C. Plum</u> (Universität Oldenburg) & M. Smykala	Altered stoichiometry and species interactions in coastal Antarctic plankton communities under global climate change

<u>E. Pushkareva</u> (Universität zu Köln), J. Elster, A. Holzinger & B. Becker	Microbial community composition in polar biocrusts assessed by amplicon metagenomics sequencing
K.A. Reeve, M. Hoppema, T. Kanzow, O. Boebel & W. Geibert	East versus West: long-term nutrient trends in the Weddell Gyre
E. Rhielle & D.R. Dietrich	Pole to Pole Exchange: Climate facilitated cyanobacterial parasite pressure & mat ecosystem response
<u>M. B. Ruiz</u> (Universität Duisburg-Essen / AWI-B), F. Leese & C. Havermans	Sight unseen: Elucidating the trophic role and metapopulation structure of Southern Ocean gelatinous zooplankton using DNA metabarcoding
<u>F. Säring</u> (Universität Rostock), H. Link & G. Veit-Köhler	Polychaete community distribution (functional and taxonomic groups) in shelf regions of the Weddell Sea
<u>K. Schimani</u> (FU Berlin / ZE BGBM), N. Abarca, O. Skibbe, U. Karsten & <u>J. Zimmermann</u> (FU Berlin / ZE BGBM)	Biodiversity and biogeography of marine benthic diatoms in Antarctic and Arctic coastal zones to evaluate the degree of endemism using fine-grained taxonomy and metabarcoding
<u>T. Seehaus</u> (FAU Erlangen-Nürnberg)	Quantification of glacier changes along the Antarctic Peninsula using aerial imagery
<u>P. Seifert</u> (TROPOS Leipzig) & <u>M. Radenz</u> (TROPOS Leipzig)	The first year of the COALA project: Preparation for vertical profiling of aerosol, clouds and atmospheric dynamics at Neumayer III station
<u>T. Stichel</u> (AWI-B), J. Freitag, S. Henkel, W. Geibert & S. Kasten	Marine Ice: A sleeping iron giant in the Southern Ocean?
<u>G. Verhaegen</u> (AWI-B), J. J. Soto-Angel, M. Haase & C. Havermans	Where are the jellyfish? An integrative molecular study to reveal the gelatinous zooplankton species diversity, distribution, and connectivity within a changing Southern Ocean
<u>F.C. Wermter</u> (Universität Bremen), C. Bock & W. Dreher	Unrevealing the neurophysiological mechanisms responsible for OWA induced behavioral changes in polar fish: an NMR approach
<u>S. Willmes</u> (Universität Trier) & S. Paul	Patterns and Drivers of Sea ice dynamics in the Southern Ocean (PADOS)
<u>A. Winterl</u> (FAU Erlangen-Nürnberg), S. Richter, B. Fabry & D. P. Zitterbart	Remote Sensing of Emperor Penguin Colony Health and Foraging Success as indicators for the Southern Ocean's Ecosystem
G. Witt, <u>S. Zwicker</u> (ZMT Bremen / Universität Bremen) & M. Brenner	Record - Recording the baseline before the change: First steps towards an integrated chemical and biological pollution and effects assessment off Dronning Maud Land
<u>L. Wunder</u> (Universität Bremen), G. Willis Poratti, D. Aromokeye, X. Yin, T. Richter-Heitmann & <u>M. W. Friedrich</u> (Universität Bremen)	Environmental controls of iron-reducing microorganisms in Antarctic marine sediments – update 2022
O. Wurl, T. Badewien, D.L. Arévalo-Martinez & <u>H.W. Bange</u> (GEOMAR Kiel)	Exchange fluxes of climate-relevant trace gases off the Western AntArctic Peninsula (EWARP)
<u>C. Zurhelle</u> (Universität Bremen), M. Jacob, <u>T. Harder</u> (Universität Bremen) & J. Tebben	Siderophore mediated iron acquisition of psychrophilic Antarctic marine bacteria