
Koordinations-Workshop SPP 1158

(5.-6. Okt. 2011, auf der Ebernburg in Bad Münster am Stein)

Mittwoch, 5. Oktober 2011

13:00 Uhr Einführung

- Martin Melles (Köln), Burkhard Büdel (Kaisersl.) Begrüßung und Einführung
- Birgit Scheibner (Bonn) Antrags- und Begutachtungsverfahren im SPP 1158
- Detlef Damaske (Hannover) German Antarctic North Victoria Land Expedition (GANOVEX 11)
- Doris Abele (Bremerhaven) Impact of climate induced glacial melting on marine coastal systems in the Western Antarctic Peninsula region (IMCOAST)

14:00 Uhr Kurzvorträge Atmosphäre und Meereis (Moderation: Hartmut Hellmer)

- Janna Abalichin (Berlin), Ulrike Langematz Sea ice and stratospheric ozone – links and impacts in the Arctic and Antarctic (ISOLAA)
- Alexander Kokhanovsky (Bremen), Gerit Birnbaum, Gunther Seckmeyer Radiative properties of atmosphere and snow surface on the plateau - a joint study linking radiative transfer modeling to in-situ and spaceborne observations
- Saskia Schäfer (Hannover), Gunther Seckmeyer Determination of spectral radiance and snow reflection properties on the antarctic plateau
- Maria Hörhold (Bremen), Georg Heygster, Christian Weikusat Interaktion von Mikrowellen und polarem Firn

14:40 Uhr Kurzvorträge Land und Inlandeis – GANOVEX 11 (Moderation: Hartmut Hellmer)

- Frank Lisker (Bremen), Cornelia Spiegel, Andreas Läufer, Julia Lindow Contrasting geomorphology: an understated key to the uplift of the Transantarctic Mountains (GANOVEX 11)
- Benjamin Bomfleur (Lawrence) Eine Fossilagerstätte in den Kirkpatrick Basalten des Transantarktischen Gebirges? (GANOVEX 11)
- Martina Mennecken (Münster), Frank Lisker, Timm John Evolution of zircon chemistry, and associated inclusion paragenesis, in I- to S-type granitoids from a continental arc setting (Wilson Terrane, Northern Victoria Land, Antarctica): Zircon as a record of dynamic continental crust formation (GANOVEX 11)
- Lothar Viereck-Goette (Jena) U/Pb-Altersbestimmungen an den initialen Magmatiten der Ferrar LIP (GANOVEX 11)
- Ricarda Hanemann (Jena), Lothar Viereck-Goette Geochemische Erst-Charakterisierung einer neu identifizierten lagig aufgebauten Ferrar-Intrusion in Nord-Viktorialand (GANOVEX 11)

Jean-Pierre de Vera
(Berlin), Ulrich Szewzyk
Ernst Hauber, Nicole
Schmitz,

Antarktis - Arktis - Mars: Terrestrische Analoge als natürliche
Laboratorien für extreme planetare Umwelt- und Lebensbedingungen
(GANOVEX 11)

15:40 Uhr – Kaffeepause

16:00 Uhr Poster

Detlef Damaske
(Hannover), Peter
Schindler, Gerhard
Jentzsch, Andreas Läufer

Investigation of crustal structures on- and offshore Northern Victoria
Land, Antarctica, by 3D combined gravimetric and magnetic modelling

Fernando Fernandez-
Mendoza (Frankfurt/M.),
Stephanie Domaschke,
Christian Printzen

Differential selection of photobionts and ecophysiological acclimation
by the bipolar lichen *Cetraria aculeata*

Steffi Gäbler-Schwarz
(Bremerhaven), Ulf
Karsten, Victor Smetacek

Comparison of genetic diversity in the colony forming polar
prymnesiophyte species *Phaeocystis antarctica* and *Phaeocystis
pouchetii*

Christoph Garbe
(Heidelberg), Tobias
Binder

Recrystallization regimes in an ice sheet - Towards a microstructure-
based flow law of ice

Thomas Kalberg (Bremer-
haven), Karsten Gohl

Uplift process of Marie Byrd Land, West Antarctica, from offshore
geophysical data

Jens Grieger (Berlin),
Gregor Leckebusch, Ulrike
Langematz, Janna Aba-
lichin, M. Schuster, J.
Lange, U. Ulbrich, U.
Cubasch

Entwicklung extra-tropischer Zyklonenaktivität, die damit verbundenen
Auswirkungen auf den Antarktischen Kontinent und der Bezug zum
stratosphärischen Ozonloch

Micha Gryschka (Hanno-
ver), Christof Lüpkes,
Dmitrii Chechin, Vladimir
M. Gryanik, Siegfried
Raasch, Jens Fricke

Representation of the convective atmospheric boundary layer during
cold-air outbreaks in regional models: a joint study based on
observations, large eddy simulations and mesoscale modeling

Günther Heinemann
(Trier), Ralf Timmermann,
Vera Haid, Lars Ebner

Ice-ocean-atmosphere interactions in the western Weddell Sea:
Coastal polynyas, cyclones and bottom water formation

Oliver Huhn (Bremen)

Anthropogenic carbon in the Atlantic sector of the Southern Ocean –
Early results from first combined CFC and SF6 measurements in the
Weddell Sea

Angelika Humbert
(Hamburg)

The dynamics of Fimbulisen, Antarctica: modelling and insights from
data analysis

Gerhard Jentzsch (Jena),
R. Ricker, M. Dubbini, A.
Capra, G. Casula, A.
Zanutta, D. Damaske

Geodynamics of northern Victoria-Land, Antarctica, inferred by GPS
and micro-gravity measurements (GANOVEX 11)

Nadine John (Jena),
Robert Schöner, Reinhard
Gaupp

Sedimentary architecture and provenance of the Permian Beacon
Supergroup of North Victoria Land, Antarctica: Implications for the
correlation of a fluvial system

<u>Ulf Karsten</u> (Rostock), Caroline Schlie, Burkhard Becker,	Dark survival strategies in polar benthic diatoms
<u>Fabian Kilpert</u> (Bremer- haven), Stephan Fricken- haus, Klaus Valentin, Bank Beszteri	PhyloAssigner - identification of taxa using phylogenetic methods
<u>Bernd Kutschan</u> (Müns- ter), Silke Thoms_Klaus Morawetz, S. Gemming	Formation of brine channels in sea ice
<u>Florian Leese</u> (Bochum), Christoph Held, Christoph Mayer	Genetic structure and connectedness of Southern Ocean pycnogonids (<i>Chelicerata: Pycnogonida</i>) in a changing environment
<u>Ansa Lindeque</u> (Bremer- haven), Yasmina Martos- Martin, Karsten Gohl, Andrés Maldonado	The Weddell Sea – Scotia Sea Transect: a stratigraphic correlation of deep sea seismic reflection data along the Atlantic margin of West Antarctica
<u>Ansa Lindeque</u> (Bremer- haven), Karsten Gohl, Gabriele Uenzelmann- Neben	The first Ross Sea – Amundsen Sea Transect: a stratigraphic correlation of deep sea seismic reflection data along the Pacific margin of West Antarctica
<u>Julia Lindow</u> (Bremen)	Glacial retreat since the Last Glacial Maximum – new constraints from the Walgreen Coast, West Antarctica
<u>Julia Lindow</u> (Bremen)	Constraining the latest stage exhumation of Marie Byrd and Ellsworth Land, West Antarctica
<u>Frank Lisker</u> (Bremen), Cornelia Spiegel, Andreas Läufer, Prenzel	The influence of climate and tectonics on uplift and denudation of the Terra Nova Bay region (Transantarctic Mountains)
<u>Frank Lisker</u> (Bremen), Cornelia Spiegel, Karsten Gohl, Julia Lindow	Coupling of lithosphere dynamics, surface processes and ice sheet evolution – constraints from Marie Byrd Land, West Antarctica
Patrick Monien (Olden- burg), Stephen J. Roberts, Julia Lofffield, Emma P. Watcham, Dominic Hodg- son, Mike J. Bentley, Bernhard Schnetger, Hans-Jürgen Brumsack, <u>Doris Abele</u>	A 9000-year history of climate change as recorded by ornithogenic lake sediments at Ardley Island (maritime Antarctica)
<u>Carolin Plate</u> (Kaiserslau- tern), Ralf Müller, Angelika Humbert, Dietmar Gross	Finite Element Analysis of the criticality of different crack scenarios in the Wilkins Ice Shelf
<u>Harald Poigner</u> (Bremer- haven), Doris Abele, Patrick Monien, Hans Brumsack, Dorothee Wilhelms-Dick	Correlation between the geochemical composition of sediments and metal concentrations in bivalve tissues (Potter Cove, Antarctica)
Armin Rose (Wilhelmshaven)	Meiobenthic biodiversity of the formerly iceshelf-covered Larsen A and B areas east of the Antarctic Peninsula
<u>Sabine Schründer</u> (Bremen), Sigrid Schiel	Überwinterungsstrategien polarer Copepoden: Physiologische Kontrollmechanismen und Auftriebsregulation durch Ammonium

<u>Maren Seibt</u> (Oldenburg), Jutta Niggemann, Thorsten Dittmar	Dissolved organic matter in the Southern Ocean: links between molecules and microbes
<u>Daniela Sprenk</u> (Köln), Michael Weber, Gerhard Kuhn	Glacial ice-sheet dynamics and retreat deduced from southeastern Weddell Sea sediment
<u>Daniela Storch</u> (Bremerhaven)	Tolerance limits of early life history stages and their relevance for the biodiversity and biogeography of reptant decapod crustaceans
<u>Anneli Strobel</u> (Bremerhaven), Hans O. Pörtner, Felix C. Mark	Mitochondrial plasticity in response to changing abiotic factors in Antarctic fish and cephalopods
<u>Marc Taylor</u> (Bremerhaven), Martin Losch, Astrid Bracher	On the drivers of phytoplankton blooms in the Antarctic seasonal ice zone: a GCM approach
<u>Scarlett Trimborn</u> (Bremerhaven)	Effects of CO ₂ and iron on Antarctic phytoplankton
<u>Christian Weikusat</u> (Bremerhaven)	Raman spectroscopy of micro-inclusions in Antarctic ice cores
<u>Ilka Weikusat</u> (Bremerhaven)	Morphology and crystallography of ice grains in Antarctic deep drilling samples (EDML): cryogenic EBSD, X-ray Laue diffraction and optical microscopy
<u>Daniel Paranhos Zitterbart</u> (Erlangen), Sebastian Richter, Werner Schneider, Ben Fabry	Low-cost observatory for monitoring penguin colonies

16:30 Uhr *Kurzvorträge Land und Inlandeis – Sonstige (Moderation: Detlef Damaske)*

Christoph Held (Bremerhaven), Ralph Tollrian, <u>Florian Leese</u>	Phylogeography and genetic diversity of Southern Ocean Lysianassoidea (<i>Crustacea; Amphipoda</i>)
<u>Ansa Lindeque</u> (Bremerhaven), Karsten Gohl	TRACS - Tracking (tracing?) the response of the Antarctic Ice Sheets to past climate change in the offshore sediment record
<u>Daniela Jansen</u> (Swansea)	Buttressing of ice shelves: the role of ice inhomogeneities, costal boundaries and calving front positions in ice dynamics of the Larsen B and C ice shelves and their tributary glaciers
<u>Matthias Mengel</u> (Potsdam), Anders Levermann	Investigating the potential of self-accelerating solid ice discharge from East Antarctica
<u>Matthias Braun</u> (Fairbanks)	Elevation and velocity changes along the Antarctic Peninsula
<u>Bernd Dachwald</u> (Aachen) Marco Feldmann, Changsheng Xu, Clemens Espe, Engelbert Plescher	IceMole - Entwicklung und Test einer autonomen subglazialen Eisforschungssonde
<u>Ulrike Falk</u> (Bonn), Günther Heinemann	Multi-scale assessment of glacier mass and energy balance based on field measurements, remote sensing and modelling
<u>Andreas Richter</u> (Dresden), Reinhard Dietrich	Analysis and interpretation of geodetic observations in the region of subglacial Lake Vostok/Antarctica

<u>Malte Thoma</u> (Bremerhaven), Jürgen Determann, Klaus Grosfeld, Hartmut Hellmer, Ralf Timmermann	Volumenänderungen des Antarktischen Eisschildes infolge erhöhter Schmelzraten an der Unterseite des Filchner-Ronne Schelfeises
<u>Malte Thoma</u> (Bremerhaven), Christoph Mayer, Klaus Grosfeld, Astrid Lambrecht	Subglacial melt water budget and its impact on the ice dynamics in Antarctica and Greenland: modelling and observations
<u>Thomas Kleiner</u> (Hamburg)	Assessment of the existence of ice sheet basal growth and study of ice stream genesis using a full-Stokes ice flow model and a 3D subglacial hydrological system
<u>Christian Printzen</u> (Frankfurt/M.)	Climate impact on bacterial communities in widespread Antarctic and Arctic lichens
<u>Claudia Colesie</u> (Kaiserslautern), Burkhard Büdel	Biological soil crusts as ecosystem components in Antarctica - Their ecology, composition and carbon dynamics
<u>Ulf Karsten</u> (Rostock), Burkhard Büdel, Burkhard Becker	Biological soil crust algae in the polar regions – biodiversity, genetic diversity and ecosystem resilience under global change scenarios

19:30 Uhr – Dinner / Getränke und Häppchen

Donnerstag, 6. Oktober 2011

8:30 Uhr **Kurzvorträge Südozean (Moderation: Martin Melles)**

<u>Kerstin Jerosch</u> (Bremerhaven)	Identification of biogeochemical provinces in the Southern Ocean: spatial modeling of biological, geochemical and sedimentological data
<u>Tilman Dinter</u> (Bremerhaven), Astrid Bracher, Marco Vountas	Retrieval of Phytoplankton Functional Types (PFTs) using a synergistic multi-/hyperspectral satellite data approach
<u>Katharina Kohls</u> (Bremerhaven)	Biodiversity and ecological role of prokaryotes (<i>cyanobacteria</i> , <i>bacteria</i> , <i>archaea</i>) in the Southern Ocean with respect to global warming
<u>Andrea Abelmann</u> (Bremerhaven), Birgit Schneider	Glacial/interglacial hydrographic structures and nutrient utilization in the Pacific Southern Ocean - a data and modeling approach
<u>Claudio Richter</u> (Bremerhaven)	Large amplitude internal waves and benthic-pelagic coupling on the Antarctic shelf
<u>Andreas Will</u> (Cottbus)	Application of a regional climate model on the assessment of consistency of late glacial to Holocene multiproxy analyses from Southern South America and Antarctica with simulated circulation regimes
<u>Dorte Janussen</u> (Frankfurt/M.)	Prosperity and limits of sponges in the area of the former Larsen A/B ice shelves
Stefanie Kaiser (Hamburg), <u>Laura Würzberg</u>	Assessing and predicting bathymetric and geographic range size in Southern Ocean isopod crustaceans (<i>Malacostraca</i>) as a result of environmental change

Ute Mühlenhardt-Siegel (Hamburg), <u>Laura Würzburg</u>	Kann man Faunenprovinzen in der Antarktis am Beispiel der <i>Cumacea</i> (<i>Crustacea</i> , <i>Peracarida</i>) erkennen?
Jan-Hendrik Körber (Bremen), Heiko Sahling, Gerhard Bohrmann	Seeps and vents from trench to the back-arc of the Sandwich Plate - fluid and gas circulation of a microplate

10:00 Uhr – Kaffeepause

10:30 Uhr *Kurzvorträge Südozean (Moderation: Sieglinde Ott)*

<u>Heike Link</u> (Rimouski)	The state of benthic ecosystem functioning and its fate with community changes on formerly ice-covered Antarctic shelves
<u>Astrid Cornils</u> (Bremerhaven)	Molecular phylogeography and ecology of antarctic <i>Clausocalanidae</i> (<i>Copepoda</i> ; <i>Crustacea</i>)
<u>Kerstin Jerosch</u> (Bremerhaven), Katharina Zacher	Impact of global warming on Antarctic and Arctic seaweeds - consequences for community structure and spatial distribution
<u>Christian Wolf</u> (Bremerhaven), Katja Metfies, Ulf Karsten	Evaluating the response of Antarctic phytoplankton communities towards environmental change by combining molecular assessments of community composition and physiological experiments
Sara Beszteri (Bremerhaven), <u>Steffi Gäbler-Schwarz</u>	Modulation of the iron limitation response of Southern Ocean diatoms by low silicate and high CO ₂ concentrations
<u>Laura Würzburg</u> (Hamburg), Martin Hess, Angelika Brandt	How are mouthpart and digestive tract morphology adapted to different feeding strategies in deep-sea invertebrates? 3-D-visualisation in Southern Ocean deep-sea isopods
Roland Melzer (München), Michael Schrödl, <u>Andrea Weis</u>	Cryptic diversity or extinction pump? Phylogeography and evolution of the southern South American benthos - a comparison to Antarctica
<u>Shobhit Agrawal</u> (Bremerhaven), Christoph Held, Christoph Schubart, Florian Leese, Christoph Mayer	The legacy of Southern Ocean past: evolutionary history and genetic diversity of benthic crustacea on the Antarctic shelf

12:00 Uhr – Mittagspause

13:00 – 14:00Uhr *Treffen in Kleingruppen*

- Abstimmung und Planung von Projektarbeiten
- Bündelung bzw. Vernetzung von Projekten
- Langfristplanung von Projektinitiativen

14:00 – 15:00Uhr *Podiumsdiskussion*

- Zusammenfassung der Diskussion in den Kleingruppen
- Fortsetzungsantrag DFG-SPP 1158 Antarktisforschung

Ende des Workshops gegen 15:00 Uhr