



DFG-SCHWERPUNKTPROGRAMM 1158

ANTARKTIS FORSCHUNG

mit vergleichenden Untersuchungen in arktischen Eisgebieten

Programm

Koordinations-Workshop SPP 1158

(20.-22.09.2017, Friedrich-Alexander-Universität Erlangen-Nürnberg, Kollegienhaus,
Universitätsstraße 15, 91054 Erlangen)

Mittwoch, 20. September 2017

19:00 Uhr ***Icebreaker: Zusammenkunft und Auftakt in der Orangerie***
Wasserturmstraße 3, 91054 Erlangen

Donnerstag, 21. September 2017

8:30-9:15 Uhr

Matthias Braun (Universität Erlangen-Nürnberg)

Begrüßung

Ulf Karsten (Rostock)

Das SPP Antarktisforschung: Hintergrund, Antragsrunde 2016/17,
Fortsetzungsantrag und neue Entwicklungen

9:15-10:00 Uhr

Kurzvorträge

(Moderation: Petra Quillfeldt)

Inna Sokolova (Rostock)

Antarctic Reproductive Strategies in Focus (ANTARES): Impact of ocean warming and acidification on brooding performance of Antarctic calcifiers and its implications for reproduction and early development

Silke Lischka (Kiel)

Pteropods as early-warning system of ocean acidification in the Weddell Sea

Charlotte Havermans (Bremen)

Is the hyperiid amphipod *Themisto gaudichaudii* poised to displace krill in the warming region of the Southern Ocean?

Lars Dietz (Bonn), Florian Leese (Duisburg-Essen),
Christoph Mayer (Bonn)

The role of the Antarctic for the origin and global distribution of sea spiders (Pycnogonida) with a focus on the family Colossendeidae

Juan Masello (Gießen)

Radiation of the Southern Ocean storm-petrels (Oceanitinae): a role for long-range migration patterns?

Helena Herr (Hamburg)

Abundance and ecology of fin whales in the WAP

10:00-10:30 Uhr

Kaffeepause

10:30-12:00 Uhr

Kurzvorträge

(Moderation Mirko Scheinert)

Jörg Ebbing (Kiel)

Taking the heat of Antarctica from space

Martin Horwath (Dresden),
Mirko Scheinert (Dresden)

Geodäsie Antarktis

Clemens Schannwell
(Tübingen)

Quantifying millennial timescale grounding-line retreat rates in East Antarctica

Anna Ksienzyk (Bergen)

Tectonic history of the Dronning Maud Land Mountains and their significance for the Cenozoic glaciation of Antarctica

Frank Lisker (Bremen),
Cornelia Spiegel (Bremen),
Andreas Läufer (Hannover)

Exhumation and uplift of the Transantarctic Mountains

Cornelia Spiegel (Bremen),
vorgestellt von Frank Lisker
(Bremen)

The Scotia Sea puzzle – a reconnaissance study

Ricarda Hanemann (Jena)

The emplacement history of the Jurassic Ferrar Magmatic Province and its post-emplacement geochemical evolution: new evidence from southern North Victoria Land, Antarctica

Till Sachau (Tübingen),
vorgestellt von Daniela Jansen (Bremerhaven)

Computer modeling and geophysical reconstruction of structures in ice sheets and their evolution: decipher the dynamic feedback loop between ice flow, folding, fabric development and strain localization

Christoph Schaller
(Bremerhaven)

On the evolution of the snowpack on the East Antarctic plateau and its implications for paleoclimate proxies in ice cores

Marc Wengler
(Bremerhaven)

Dust provenance in the Pacific and Atlantic sector of the Southern Ocean

Michael Friedrich (Bremen)

Methane cycling in iron-rich sediments of sub-antarctic South Georgia

12:00-13:00 Uhr

Mittagspause in der Orangerie

13:00-15:00 Uhr

Postersession in der Orangerie

(13:00-14:00 Uhr Poster mit ungerader Nummer
14:00-15:00 Uhr Poster mit gerader Nummer)

15:00-15:30 Uhr

Kaffeepause

15:30-17:15 Uhr

Kurzvorträge

(Moderation: Matthias Braun)

Moritz Holtappels
(Bremerhaven), Andreas Lorke (Koblenz-Landau),
vorgestellt von Stefanie Arndt (Bremerhaven)

Under-ice flux measurements of heat, salt and oxygen by means of Eddy Covariance

Tilmann Harder (Bremen),
Jan Tebben (Bremerhaven)

Influence of trophic shifts (autotrophy versus mixotrophy) on carbon flux in the Southern Ocean - an analytical chemistry approach

Krissy Reeve (Bremerhaven)

The Weddell Gyre: drivers of the long-term nutrient increase in the upper ocean

Jean-Louis Bonne
(Bremerhaven)

Water isotopic composition from the ocean surface to the ice sheet

| | |
|--|--|
| Oliver Huhn (Bremen), vorgestellt von <u>Boris Koch</u> (Bremerhaven) | Ice shelf melting in the western Weddell Sea (Larsen Ice Shelf) quantified by oceanographic noble gas measurements |
| <u>Ulrike Falk</u> (Bremerhaven), Ben Marzeion (Bremen) | Peripheral glaciers of Antarctica and their contribution to sea level rise |
| <u>Stefan Kowalewski</u> (Bremerhaven) | Unveiling the role of episodic precipitation events for the West Antarctic ice sheet from process model simulations and radar observations |
| <u>Ralf Müller</u> (Kaiserslautern), Angelika Humbert (Bremerhaven) | solidFIDEMO – a firn densification model for volumetric mass balances and delta-age |
| <u>Ricarda Winkelmann</u> (Potsdam) | Hysteresis of the Antarctic Ice Sheet |
| Ulrike Langematz (Berlin), Irina Rogozhina (Bremen), Matthias Prange (Bremen), vorgestellt von <u>Markus Kunze</u> (Berlin) | Comparing the Antarctic and Arctic REsponse to SOLar VARIability in Climate and Cryospheric Dynamics: Lessons from the Past Centuries to Anticipate Future Changes (RESOLVA) |
| Patric Seifert (Leipzig), vorgestellt von <u>Johannes Bühl</u> (Leipzig) | Aerosol exchange between the polar regions and the midlatitudes and its impact on clouds and precipitation |
| Manfred Wendisch (Leipzig), vorgestellt von <u>André Ehrlich</u> (Leipzig) | Extending satellite retrieval of effective snow grain size to cloud covered scenes |
| <u>Günther Heinemann</u> (Trier) | Regional high-resolution Downscaling of Climate Change in the Weddell Sea, Antarctica (REDOCCA) |

17:15-18:00 Uhr

Kurzvorträge
(Moderation: Boris Koch)

| | |
|---|---|
| <u>Larysa Istomina</u> (Bremen) | Detecting melt and flooding of Antarctic sea ice from optical satellite observations |
| Monica Ionita-Scholz (Bremerhaven), vorgestellt von <u>Renate Treffeisen</u> (Bremerhaven) | Variability and potential predictability of Antarctic Sea Ice |
| <u>Stefanie Arndt</u> (Bremerhaven) | Snow contrasts controlling the fate of sea ice |
| Lars Kaleschke (Hamburg), Marcel Nicolaus (Bremerhaven), vorgestellt von <u>Nina Maaß</u> (Hamburg) | Snow Covers impacts on Antarctic Sea Ice (SCASI) |
| <u>Stephan Paul</u> (Bremerhaven) | Pan-Antarctic Monitoring of Polynya/Fast-Ice Interactions |
| <u>Bernd Kutschau</u> (Münster), Silke Thoms (Bremerhaven) | Identification of growth parameter of snow and ice crystals using phase field methods |

19:00 Uhr

Abendessen
Entlas-Keller, An den Kellern 5, 91054 Erlangen

Freitag, 22. September 2017

8:30-9:30 Uhr

Jan Schulz (Oldenburg),
Oliver Zielinski
(Oldenburg), Barbara
Niehoff (Bremerhaven),
vorgestellt von Astrid
Cornils (Bremerhaven)

Astrid Cornils
(Bremerhaven)

Ulf Karsten (Rostock),
Hans-Peter Grossart
(Stechlin)

Scarlett Trimborn
(Bremen)

Daniela Storch
(Bremerhaven)

Andreas Beck
(München)

Burkhard Becker (Köln)

Kurzvorträge

(Moderation: Inna Sokolova)

Ecological niches of Antarctic zooplankton: new optical methods to elucidate the role of hydrographical conditions for the fine scale distribution of key species

Molecular Biodiversity of Antarctic Zooplankton

Ecological role of fungal parasites in benthic diatoms of polar coastal waters

Iron manganese co-limitation – a potential driver of Southern Ocean phytoplankton ecology

Physiological limits of “bottleneck life stages” to climate change: Future predictions of Antarctic and Arctic ecosystem changes

Effect of global change on metabolite profiles of Antarctic lichens

Biological soil crusts algae in the polar regions – biodiversity, genetic diversity and ecosystem resilience under global climate change scenarios

9:30-10:00 Uhr

Günther Heinemann
(Trier)

Tim Carlsen (Leipzig),
Stefanie Arndt
(Bremerhaven)

Rainer Lehmann
(Hannover)

Netzwerke

(Moderation: Frank Lisker)

SCAR - Scientific Committee on Antarctic Research

APECS - Association of Polar Early Career Scientists

Polarlehrer

10:00-10:30 Uhr

Kaffeepause

10:30-11:30 Uhr

Logistik und Datenbank PANGAEA

(Moderation: Frank Lisker)

Andreas Läufer
(Hannover)

Eberhard Kohlberg
(Bremerhaven)

Amelie Driemel
(Bremerhaven)

Logistik der Bundesanstalt für Geowissenschaften und Rohstoffe

Logistik des Alfred-Wegener-Instituts: Polarstern, Stationen und Polarflieger

PANGAEA® - Data Publisher for Earth & Environmental Science

| | |
|------------------------|--|
| 11:30-12:00 Uhr | Treffen in Kleingruppen Abstimmung und Planung von Projektarbeiten Bündelung bzw. Vernetzung von Projekten Langfristplanung von Projektinitiativen |
| 12:00-13:00 Uhr | Mittagspause in der Orangerie |
| 13:00-13:30 Uhr | Abschluss-/Podiumsdiskussion |
| 14:00-16:00 Uhr | Polarlehrer-Treffen |
