

MarDATA Retreat

18 & 19 Nov 2024



MarDATA | Helmholtz School for Marine Data Science

We are pleased to invite you to the annual MarDATA Retreat, an event dedicated to showcasing cutting-edge research in marine data science and fostering collaboration across scientific disciplines.

The MarDATA Retreat brings together scientists from a wide range of marine and data science backgrounds to exchange insights and explore innovations in the field of marine data science. The retreat will feature project update presentations from MarDATA doctoral researchers, covering topics such as oceanographic data analysis, machine learning applications in marine research, remote sensing, and predictive modelling.

The **project update sessions and invited keynotes** are open to all scientists and researchers with an interest in marine data science.

Participation in the project update sessions does not require registration.

Venue:

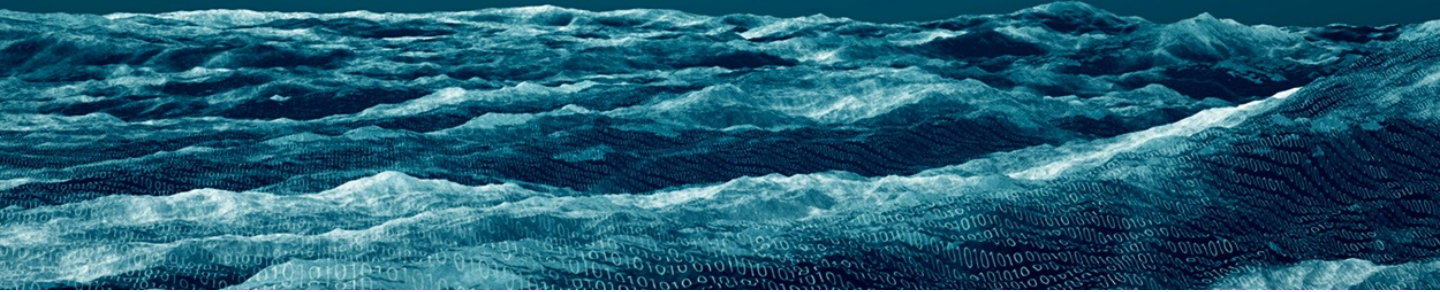
AWI Campus Klußmannstraße (H)

Room: H0048

Klußmannstraße 3

27570 Bremerhaven

Monday, November 18, 2024



11:30 *Arrival & light lunch*

12:30 **Welcome**

13:00 **Project Updates** (*open to public*)

"Global prediction of burial rates of organic carbon in sediments" **Naveen Kumar Parameswaran, GEOMAR**

"An ocean in a tank: Optical twins of the ocean for ground-truth images in marine computer vision" **Patricia Schöntag, GEOMAR**

"A.I. Unravelling mysteries of ice core microstructure" **Faramarz Bagherzadeh, AWI**

14:30 *Coffee Break & Group picture*

15:00 **Project Updates** (*open to public*)

"Towards representation learning of radar altimeter waveforms for sea ice surface classification" **Lena Happ, AWI**

"Enhancing the reconstructed satellite product with the fusion of continuous hyperspectral in-situ measurements" **Ehsan Mehdipour, AWI**

"Can neural networks outsmart artificial eddies? Exploring AI-based parameterization in ocean models" **Rajka Juhrbandt, AWI**

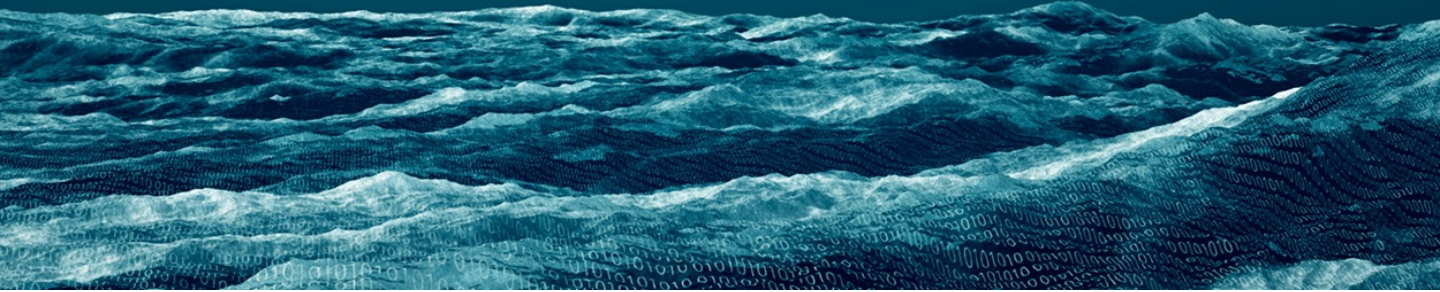
16:30 *Coffee Break*

17:15 **Invited Talk**

"VESA: Visualisation Enabled Search Application" **Dr. Ing Pawandeep Kaur Betz , DLR**

18:00 **Poster Session & Social**

Tuesday, November 19, 2024



- 09:00** **MarDATA Doctoral Researchers General Assembly** (Doctoral Researchers only)
- 10:00** *Coffee Break*
- 10:30** **Keynote, Prof. Stefan Oehmcke**, Visual & Analytic Computation of Ocean Technologies, Rostock University *(open to public)*
- 11:30** **“Shaping the Future: Innovative Ideas for advancing MarDATA - a brainstorming session”**
- 12:30** Lunch
- 13:30** **Project Updates** (open to public)
 - “Links between climate and volcanism” José Kling, GEOMAR*
 - “Reconstructing Paleoecological Food Web Dynamics Through Network Analysis” Viktor Dinkel, AWI*
 - “Paleoclimate reconstructions from Antarctic borehole” Ksehma Shaju, AWI*
- 15:00** **Farewell**
- 15:15** Coffee and Departure