



## Sea Level Research Workshop

### “Sea-Level Change: Earth System Feedbacks”

Bjerknes Center for Climate Research (BCCR), Bergen, Norway – 12th October 2020  
Jahnebakken 5 - 4th floor

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### Agenda

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| 09:30 – 10:00 | <b>Coffee and Registration</b>   |
| 10:00 – 10:10 | <b>Welcome and Introduction</b> (A. Bonaduce, NERSC)   |
| 10:10 – 10:30 | <b>Overview/State of the Art/Questionnaire Outcomes</b> (A. Bonaduce, NERSC)   |
| 10:30 – 11:00 | <b>Session 1: Observation-based studies</b> <ul style="list-style-type: none"> <li>● <i>Sea-level history along the west coast of Norway</i> (John I. Svendsen, UiB)</li> <li>● <i>Arctic Sea Level Budget Assessment during the GRACE/Argo Time Period</i> (Roshin Raj, NERSC)</li> <li>● <i>Re-assessing extreme sea level events through interplay of tides and storm surges</i> (Stephen Outten, NERSC)</li> </ul> |



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| 11:00 – 11:15 | <b>Coffee break</b>   |
| 11:15 – 11:45 | <b>Session 2: Model-based studies</b> <ul style="list-style-type: none"> <li>● <i>Ice sheet modelling at Bjerknes Center</i> (Petra Langebroek, NORCE)</li> <br/> <li>● <i>Concurrency of sea level and wave height extremes in Norwegian coastal waters</i> (Ole Johan Aarnes, Norwegian Meteorological Institute)</li> <br/> <li>● <i>Introducing the Norwegian Climate Prediction Model and Mare Nullius project</i> (Noel Keenlyside, UiB/NERSC; Vandhna Kumar, UiB)</li> </ul> |
| 11:45 – 12:15 | <b>Session 3: Synergy between observations and models</b> <ul style="list-style-type: none"> <li>● <i>New tools to estimate the stability of the Greenland ice sheet</i> (Andreas Born, UiB)</li> <br/> <li>● <i>Coastal Changes during 21st Century</i> (William Helland-Hansen, UiB)</li> <br/> <li>● <i>Sea level in Arctic ocean reanalysis</i> (Jiping Xie, NERSC)</li> </ul>  |
| 12:15 – 13:00 | <b>Lunch break</b>  |
| 13:00 – 13:30 | <b>Session 4: Sea-level projections</b> <ul style="list-style-type: none"> <li>● <i>The future sea-level contribution of the Greenland ice sheet: a multi-model ensemble study of ISMIP6</i> (Heiko Goelzer, NORCE)</li> <br/> <li>● <i>Current sea-level projections for Norway (NCCS report) and where to go from there</i> (Kristin Richter, NORCE)</li> </ul>   |
| 13:30 – 14:00 | <b>Session 5: Innovative Methods (Keynote)</b> <ul style="list-style-type: none"> <li>● <i>Overview of ML/AI methods in marine science</i> (Ketil Malde, IMR; Machine Learning group Departments of Informatics, UiB)</li> </ul>  |



14:00 – 14:15      **Coffee Break**

14:15 – 15:45      **Discussion and Tasks** (A. N. Meckler, K. Nisancioglu, BCCR)

- **Priorities** to realize cross-disciplinary studies
- Identify **skills, expertise and knowledge gaps**
- Identify strategic **partnerships** (national and international)
- Deliver a **workshop report**
- Develop a **strategy and implementation** plan for short- and medium- term research activities
- The launch of the Bjerknes Centre **“Sea-Level Research Group”** (SLRG).

15:45 – 16:00      **Final Remarks** (J. A. Johannessen, NERSC)

### List of Participants

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