



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



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



14:00 – 14:15 **Coffee Break**

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

- The relevance of **sea-level research** in regard to the transition of **Bjerknes Center** from Phase 2 to Phase 3 (Tore Furevik, 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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