

Nordic branch IGS 2021

PROGRAM

(Version 4 Nov.)



Thursday 4 Nov Venue: [NVE](#), Middelthuns gate 29, Majorstuen

17:00-18:00 [Early-career Glaciologist Group \(EGG\) get together](#) at NVE

17.30-18.00 [Registration](#) (please bring your favorite name tag; no tags provided)

18.00-22.00 [Icebreaker](#) at NVE

Friday 5 Nov Venue: [Georg Sverdrups Hus Aud 1](#),
Univ. Oslo, [Moltke Moes vei 39](#)

08.30-09.00 [Registration](#) (please bring your favorite name tag; no tags provided)

09.00-09.10 [Welcome, opening](#)

Greenland surface processes. Chair: XXX

09:10-09:25 **Heiko Goelzer**: Relative importance of surface mass balance and outlet glacier forcing in ISMIP6 Greenland ice sheet sea-level projections

09:25-09:40 **Idunn Aarnes Mostue***: Greenland surface energy budget response in CMIP6

09:40-09:55 **Shunan Feng***: Long time series of albedo dynamics on Greenland from harmonized Landsat and Sentinel 2 imagery

09:55-10:10 **Tobias Zolles***: How does a change in climate variability impact the Greenland ice-sheet surface mass balance?

10:10-10:25 **Olav Orheim**: New results from SCAR International Iceberg Database

10:25-11:00 [Coffee and tea](#)

Glacier dynamics. Chair: XXX

11.00-11.15 **Ruitang Yang***: Glacier changes on the Kenai Peninsula, Alaska: Mass balance and ice flow using remote sensing

11.15-11.30 **Thomas Y. Chen***: Conducting Novel Glacial Movement Prediction Machine Learning Algorithm Intercomparisons

11.30-11.45 **Pierre-Marie Lefeuvre**: Step-wise surface velocity increase at Kongsvegen, Svalbard from a dense GNSS network

11.45-12.00 **Dylan Kreynen***: Sticky Snow: Combining Snow and Radiative Transfer Models in the Percolation Area of the Greenland Ice Sheet

12.00-13.15 [Lunch](#)

Glacier changes. Chair: XXX

- 13.15-13.30 **Paul Weber:** Glacier area loss since the Little Ice Age (LIA)—Preliminary results and means of assessing uncertainties in LIA glacier reconstructions
- 13.30-13.45 **Guðfinna Aðalgeirsdóttir:** Glacier changes in Iceland ~1890-2021
- 13.45-14.00 **Thorsteinn Thorsteinsson:** Hofsjökull ice cap, Central Iceland: Latest results from mass-balance measurements and snow radar surveys
- 14:00-14:15 **Veijo Pojohla:** SNODDAS- a methodology for better estimates of snow water storage and improved prediction of routing into hydro power dams
- 14.15-14.30 **Liss Marie Andreassen:** An updated glacier and glacier lake inventory of Norway

14.30-15.00 Coffee and tea

Ice sheets and instabilities. Chair: XXX

- 15.15-15.30 **Nanna B Karlsson:** Constraining the basal melt of the Greenland Ice Sheet
- 15.30-15.45 **David Chandler:** Last interglacial Antarctic Ice Sheet (in)stabilities
- 15.45-16.00 **Jack Kohler:** Continuing saga of Kongsvegen, STILL on the verge of a surge

16.00-17.00 IGS Annual General Meeting (AGM)

17:15-19:00 **Poster session** (at [Kjemikantina](#)) - with author attendance

19.00-23.00 Conference banquet dinner at [Kjemikantina](#), University of Oslo (Sem Sælands vei 26)

Saturday 6 Nov	Venue: Georg Sverdrups Hus Aud 1, Univ. Oslo, Moltke Moes vei 39
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Glacier surges and ice dynamics. Chair: XXX

- 09.00-09.15 **Désirée Treichler:** Observing small surging glaciers from space
- 09.15-09.30 **Truls Thorsen Karlsen:** Measuring velocities of a surge type glacier with SAR interferometry using ALOS-2 data
- 09.30-09.45 **Coline Bouchayer*:** Surging potential and probabilistic map of surging for Svalbard glaciers
- 09.45-11.00 **Tómas Jóhannesson:** Continuous monitoring of ice dynamics in Iceland with Sentinel-1
- 11.00-11.15 **Louise Steffensen Schmidt:** Glacier meltwater runoff in the Barents Sea region, 1998-2021

10.15-10.45 Coffee and tea

Glacier processes. Chair: XXX

- 10.45-11.00 **Mike Prior-Jones:** Open-source instruments for real-time wireless field glaciology
- 11.00-11.15 **Samuel Cook:** 2D assimilation with Stokes reconstructs synthetic glacier beds well across a range of scenarios
- 11.15-11.30 **Alun Hubbard:** Multi-stage fracture of the Greenland ice sheet initiated by compressive flow
- 11.30-11.45 **Andreas Alexander:** Interdisciplinary observations of the Setevatnet glacier lake outburst flood
- 11.45-12.00 **Magnus Mar Magnusson / PiM Lefevre** - IGS's new homepage and EGG (Early-Career Glaciologists) information

12.00-13.15 Lunch

Lunch discussion about future in academia for Early-Career Glaciologists (EGG) (in separate room, contact PiM Lefevre)

Ice Ocean Interactions & ice sheets. Chair: XXX

- 13.15-13.30 **Henning Åkesson:** Can Petermann Glacier recover from future collapse of its ice shelf?
- 13.30-13.45 **Signe Hillerup Larsen:** Multi-decadal solid ice discharge variations at Helheim glacier
- 13.45-14.00 **Katrin Lindbäck:** Basal channel melting and strain rates at Fimbulisen ice shelf, East Antarctica
- 14.15-14.15 **Kenny Matsuoka:** Antarctic RINGS: a new SCAR initiative to characterize the ice-sheet margin all around Antarctica
- 14.15-14.30 **Calvin Shackleton:** Glaciological investigations near Dome Fuji, inland East Antarctica

14.30-15.00 Coffee and tea

Ice sheets, glaciers, snow Chair: XXX

- 15.00-15.15 **Thomas Zwinger:** Interaction of ice-sheets with groundwater and permafrost
- 15.15-15.30 **Francisco Navarro:** Geodetic mass balance 2013-2017 of the South Shetland Islands ice caps, Antarctica
- 15.30-15.45 **Kristoffer Aalstad:** Unmixing satellite imagery using data assimilation to map snow and albedo

15.45-16.00 Ymir award: Best student oral and presentations; next Meeting; closing.

**student speaker*

Poster presentations

* *student*

Dorothee Vallot - Modelling Thwaites Glacier mélange and interaction with the ocean

Yongmei Gong - High-resolution modeling of glacier mass balance and surface runoff in western Norway driven by bias-corrected climate forcing

Yongmei Gong - Glacier impacts On The Hydrological systems in Europe and Central Asia (GOTHECA project)

Leo Duvernet* - Geomorphological evolution of the Austre Lovénbreen slopes

Thomas Frank* - A fast thickness inversion approach to reconcile ice dynamics and subglacial topography

Jacob Clement Yde - Isotope hydrology at Sørbreen, Jan Mayen

Anne Munck Solgaard - Investigating Greenland Ice Sheet flow characteristics over the past 5 years

Rebekka Frøystad* - Modeling the future of the Folgefonna glacier

Siri Engen* - Origin and consequences of a supraglacial sediment deposition event on Brenndalsbreen, Norway

Anja Løkkegaard* - Shifting Ice Flow and Direction in the Greenland Ice Sheet Interior Since 1959

Mikkel Lauritzen* - Modelling Greenland Ice Sheet Mass Loss

Emily Wilbur* - Parallel ice sheet modeling of glacial cycle inception in Greenland

Helene Pehrsson* - Parallel Ice Sheet Model of Greenland during the last interglacial

Niels Nymand* - Radio echo sounding using newly developed surface-based multichannel radar systems

Christine Schøtt Hvidberg - An exploration rover for investigation of ice sheet changes in Greenland

Nicholas Rathmann - Inferred basal friction and mass flux affected by crystal-orientation fabrics

Paul Leclercq - Detection of glacier surge activity using cloud computing of Sentinel-1 radar data

Veijo Pohjola - Studies of the perennial firn aquifer on Lomonosovfonna, Svalbard, and/or, Snow distribution and data assimilation for improved spring flood forecasts and sustainable hydropower reservoir regulation

Josephine Maton - Glacier-Ocean interaction at Austfonna. (early results and ideas)

Andreas Born - Modeling the Greenland englacial stratigraphy

Kjetil Melvold - TBA

Ian Stevens - Cellular carbon export from glacier surfaces

Brian Whalley - Using Google Earth and ArcticDEM to evaluate debris and ice supply to mountain glacier systems

Thomas V Schuler - Deriving Svalbard glacier mass balance from in situ observations