

INTERNATIONAL GLACIOLOGICAL SOCIETY

BRITISH BRANCH MEETING

7th - 9th October 2020

PROGRAMME





Welcome

On behalf of the organising committee, we would like to welcome you to the virtual 2020 British Branch Meeting of the International Glaciological Society. Thanks to all delegates, and presenters for supporting the meeting - we look forward to hosting you and wish you a productive and enjoyable British Branch Meeting!

Meeting rooms during Zoom sessions

A document with the final schedule containing Zoom links for each session will be distributed amongst all registered participant on Monday 5th October. Please do not send this document to people who have not registered for the IGS BB, keep your microphones muted, maintain a professional atmosphere during the meeting and enjoy our great line-up of talks.

Oral Presentations

Oral presentations will be held live on Zoom. Recording of presentations is not permitted unless permission has been approved beforehand. The talk slots are 15 minutes long in total, with 12 minutes allocated for the presentation and 3 minutes for questions. The host of the meeting will allow the speakers to share their screen according to the time schedule. Questions for the discussion can either be typed into the chat or participants can indicate that they have a question and will be unmuted.

<u>ECSs presenting during IGS BB:</u> We encourage ECSs presenting during IGS BB to use 1-2 minutes of their presentation to introduce themselves, giving some information on projects they are involved and if applicable, announce if they are looking for a position in the near future.

Poster Presentations

Prior to the poster session:

We encourage all poster presenters to upload their poster to <u>Google Drive</u> in a PDF format by Monday 5th October to allow participants to view and comment before and after the poster sessions. A description about how to comment in <u>Google Drive</u> is given <u>here</u>. To give all participants an overview on the variety of poster presentations, a <u>1</u> minute introduction to all the posters will be given on Thursday at 3pm. We therefore

ask all authors of posters to send us a quick introduction to their poster (including one slide), which the session chair will then present to all participants.

During the poster session:

The poster session is scheduled for Thursday 3:30 pm. The posters will be split into sessions, taking place in different Zoom rooms. During the poster session we ask presenters to give a 2-3 minute overview of their poster, with discussion and questions to follow. Participants can switch between poster sessions (Zoom rooms) within the 1 hour slot.

Networking in cyberspace

- <u>"Speed-dating"</u>: A networking event is scheduled for Thursday 2:50 pm. We ask all participants to attend this. Participants will be split into groups of 4-6 people and will be put into a break-out room. Within this break-out room each group member can introduce themselves and their research. After 10-15 minutes the participants will be split into another group. We hope this will encourage networking and facilitate some of the social aspects of an in-person conference in cyberspace. This will especially give ECSs and scientists new to the field of glaciology the chance to get to know their colleagues and research.
- <u>"Fieldwork Tales":</u> On Thursday at 5pm a senior scientist (tba) will share stories of fieldwork from early in their career.

Twitter

Follow @egg_igs on Twitter for conference announcements and use the hashtag #igsbb2020 for any conference related tweets. We look forward to hearing from you!

Conference Schedule

DAY 1	Wednesday 07.10.2020		
12:30	Introduction		
13:00	Supraglacial hydrology and firn - Observations		
	Greenland-wide inventory of ice marginal lakes using Sentinel-1, Sentinel-2 and ArcticDEM	Penelope How	
	Seismic quality factor measured for compressional and shear waves in the firn column of Korff Ice Rise, West Antarctica	Ronan Agnew	
	Firn structure and its variability across Larsen C Ice Shelf, Antarctic Peninsula, from Multimodal Layered Transdimensional Inversion (MuLTI) of seismic dispersion curves and borehole density logs	Bernd Kulessa	
BREAK			
14:00	Supraglacial hydrology and firn - Modelling		
	Expansion of surface lakes into Greenland Ice Sheet interior enhanced by dynamically-evolving surface relief	Adam Igneczi	
	A 3-D Model of Antarctic Ice Shelf Surface Hydrology	Sammie Buzzard	
	Calving multiplier effect controlled by glacier terminus geometry	Donald Slater	
14:50	Networking event - "speed dating"		
BREAK			
16:00	Englacial records and ice cores		
	WACSWAIN project: isotope and chemical ice core record from Skytrain Ice Rise, Antarctica	Mackenzie Grieman	
	Age-Depth Stratigraphy of Pine Island Glacier Inferred from Airborne Radar and Ice-Core Chronology	Julien Bodart	

DAY 2	Thursday 08.10.2020	
12:30	Mechanisms and conditions of calving - Oberservations	
	The triggers of the disintegration of Voyeykov Ice Shelf (2007), Wilkes Land, East Antarctica, and its subsequent evolution	Jennifer Arthur
	Sensitivity of tidewater glaciers to lateral variation in submarine melting	Tom Cowton
	What is Stirring at a Lacustrine Glacier Calving Front?	Adrian Dye
BREAK		
13:30	Mechanisms and conditions of calving - Modelling	
	Constraining till permeability via tidal velocity variations	Katarzyna Warburton
	Buoyant plume based melt rate parametrizations accounting for stratified ambient ocean and non-constant slope basal geometry	Alexander Bradley
	Coupled ice-ocean simulations of the Amundsen Sea glaciers	Jan De Rydt
BREAK		
14:30	New technologies	
	94 GHz radar backscatter: Measurements of glacier terrain	William Harcourt
	GIV: A new open-source toolbox for calculating glacier velocity time series from optical satellite imagery.	Maximilian Van Wyk de Vries
15:00	1-min Introduction to posters	
15:30	Poster session (including a 3 min. presentation of each poster followed by discussion)	
BREAK		
17:00	Social event – "Tales from the old days"	

DAY 3	Friday 09.10.2020		
12:30	Alpine glaciers and glaciers in general		
	Is there a need to redefine the concept of peak water for glaciated basins?	Sally Rangecroft	
	Looking inside a mid-latitude glacier on Mars	Frances Butcher	
	Analysing palaeocirque glacier equilibrium line altitudes as indicators of palaeoclimate across the southern Scandinavian Mountains	Rachel Oien	
	Seasonally stable temperature gradients through supraglacial debris in the Everest region of Nepal, Central Himalaya	Ann Rowan	
BREAK			
14:30	Present and past ice dynamics - Subglacial observations		
	Subglacial lakes and hydrology across the Ellsworth Subglacial Highlands, West Antarctica	Felipe Napoleoni	
	Subglacial meltwater channel dimensions and processes at the ice sheet scale: 3D morphometry of a large sample of eskers	Rob Storrar	
	High resolution 3D RES imaging of subglacial lineations under the Rutford Ice Stream, West Antarctica	Rebecca Schlegel	
BREAK			
15:30	Present and past ice dynamics - Modelling		
	Characterising and quantifying shear margin ice fabric anisotropy from radar sounding	Tun Jan Young	
	The transferability of adjoint inversion products between different ice flow models	Jowan Barnes	
	From steady streaming to oscillations: the role of subglacial drainage and temperate ice in ice stream dynamics	Marianne Haseloff	
16:15	IGS British Branch AGM and prizes		

Poster sessions Thursday 08.10.2020 15:30				
Mechanisms and conditions of calving				
Baffin Bay sea ice thickness and the impact of snow depth products and processing methods	Isolde Glissenaar			
Highly temporally and spatially variable Antarctic ice flux throughout the 21st century	Bertie Miles			
Future mass balance of the East Antarctic Ice Sheet	Jim Jordan			
Quantifying uncertainty in future projections of ice loss from the Filchner-Ronne basin	Emily Hill			
Supraglacial hydrology and firn				
Structural controls on the hydrology of crevasses on the Greenland Ice Sheet	Thomas Chudley			
Towards supervised classification of open water and slush across Antarctic ice shelves	Rebecca Dell			
Detecting ice slabs in firn using seismic Full Waveform Inversion (FWI)	Emma Pearce			
Ice dynamics and reconstruction of past ice dynamics				
RICE and radars reveal retreat repertoires	Richard Hindmarsh			
Incorporating dh/dt measurements into ice flow model inversions: a case study on the Larsen C ice shelf	Tom Mitcham			
Alpine glaciers and glaciers in general				
GlacierMap: developing a citizen science glacier mapping tool for the Peruvian Andes	Caroline Clason			
Investigating fracture patterns along the Lateral Shear Margins of the Bindschadler Ice Stream	Rebecca Fletcher			
~200 years of change in mountain glacier extent of Troms and Finnmark county, northern Norway	Joshua Leigh			
Glaciers, rock glaciers and mountain landsystems	Brian Whalley			