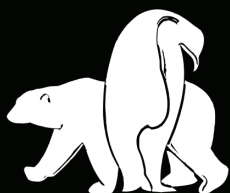


POLAR Early Career Conference

5th - 6th May 2021

Programme



UK POLAR NETWORK



**2021
2030** United Nations Decade
of Ocean Science
for Sustainable Development

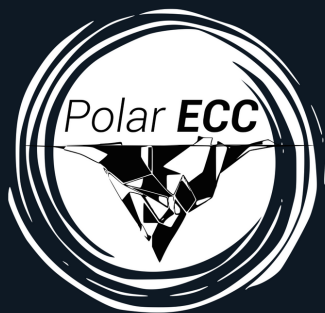


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Please see our website for the most up to date information, guidelines for presenters, and how we are making our conference as accessible as possible.

polarnetwork.org/polar-ecc

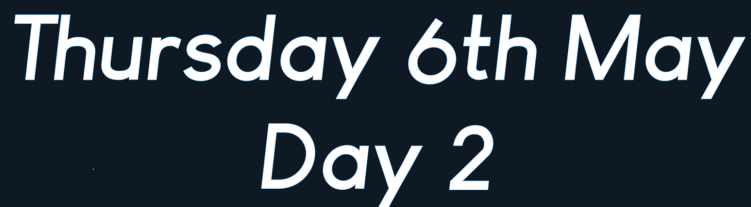
If you have any questions please feel free to contact us at polarecc@polarnetwork.org



Wednesday 5th May

Day 1

	Main Room	Room One	Room Two	Room Three	Room Four	Poster Hall	Help Desk
9am-	9:00 – 9:15 Welcome						9:00 – 17:15 Tech help & chill out room
-		9:20 – 10:20 Ecosystems talks	9:20 – 10:20 Atmosphere & climate talks		9:20 – 10:20 Social science talks		
10am-							
-	Break						
11am-		10:40 – 11:40 Ecosystems talks	10:40 – 11:40 Atmosphere & climate talks		10:40 – 11:40 Social science talks		
-							
12pm-	11:45 – 12:20 Rapid poster introductions						
-							
1pm-	Lunch					12:20 – 13:55 Posters	
-							
2pm-	14:00 – 14:25 EDI						
-							
3pm-	14:30–15:55 Continuing in academia	14:30–15:55 Data acquisition, management & analysis	14:30–15:55 Journalism & public engagement	14:30–15:55 Industry & consulting	14:30–15:55 The Poles outside of Academia		
-							
4pm-	Break						
-		16:10 – 17:10 Ecosystems talks	16:10 – 17:10 Oceanography talks				
5pm-							
-							



	Main Room	Room One	Room Two	Room Three	Room Four	Poster Hall	Help Desk
9am-	9:00 - 10:00 Keynote panel						9:00 - 17:15 Tech help & chill out room
10am-	Break	10:10 - 11:30 Ecosystems talks	10:10 - 11:30 Oceanography talks	10:10 - 11:30 Glaciology & geology talks	10:10 - 11:30 Social science talks		
11am-	Break						
12pm-	11:40 - 12:30 Rapid poster introductions						
1pm-	Lunch					12:30 - 13:55 Posters	
2pm-	14:00 - 14:55 Co-Production of Knowledge						
3pm-	15:00-15:55 Adapting a project post-lockdown	15:20 - 16:00 Ecosystems talks					
4pm-	Break	16:10 - 17:10 Ecosystems talks		16:10 - 17:10 Glaciology & geology talks	16:10 - 17:10 Inter-disciplinary talks		
5pm-	17:15 - 17:30 Thanks						17:30 - 18:00 Social

MAIN ROOM

Link (day 1): <https://plymouth.zoom.us/j/96052443582?pwd=a3YwQ3dkcWxmOGtMR3NONTBoQk43UT09>

Link (day 2): <https://plymouth.zoom.us/j/92948295438?pwd=OHB4TndQOVNOUWhLZEJVNjlKd0Y5dz09>

Password (day 1): 091585

Password (day 2): 444516

ROOM 1 - ECOSYSTEMS

Link: <https://ukri.zoom.us/j/96674852730?pwd=M29SMXdsSEZxVjQwQTIUUVpnWTkwdz09>

Password: 764555

ROOM 2 - ATMOSPHERE, CLIMATE & OCEANOGRAPHY

Link: <https://universityofleeds.zoom.us/j/81514669421?pwd=bGJPWi9oa291UFhYRjJhVUFRZ1pldz09>

Password: PoECC21!

ROOM 3 - GLACIOLOGY & GEOLOGY

Link (day 1): <https://plymouth.zoom.us/j/95140462914?pwd=SWpxNE5PUVNWeHkrNXVTL0lBbENIZz09>

Link (day 2): <https://plymouth.zoom.us/j/97935275456?pwd=RkxUbzB5TXg1OHk3emF0dDd5em91dz09>

Password (day 1): 168179

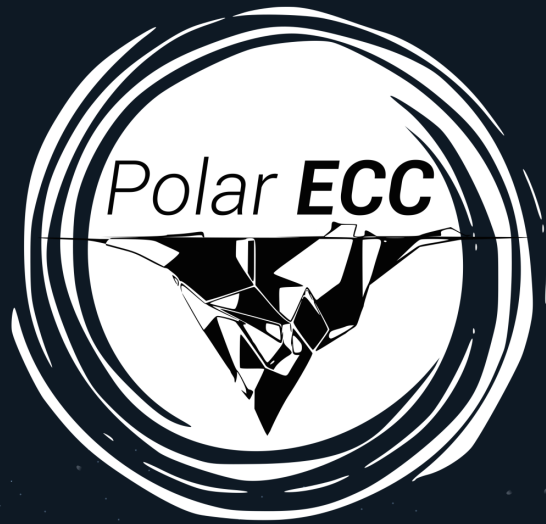
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ROOM 4 - SOCIAL SCIENCES

Link: <https://ukri.zoom.us/j/92581321225?pwd=RTlQbFNyQlQzTzBWclBBQXh3b1ZkUT09>

Password: POLARECC21

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Posters



These sessions are an informal environment and a great opportunity to hear about the posters available to view in the subsequent poster session in Gather town.

Poster presenters: If you would like to submit a slide for this presentation, you can do so when you submit their poster. We will then compile these preview slides for the rapid presentations. The presenter's name will appear on the screen before their poster preview. The presenter will be unmuted and have a maximum of two minutes to pitch their poster, after which the slides will be moved on to another presenter.

Glaciology, Geology and Oceanography

11:45 – 12:20 5th May

Atmospheric Sciences, Social Sciences & Ecosystems

11:40 – 12:30 6th May



Denis Frolov, Lomonosov Moscow State University, Geographical faculty – stand 10

Title: Extreme warm 2020 and its consequences

Abstract: 2020 was the warmest year for the history of observation according to Copernicus C3S service. This resulted in a high permafrost active layer thickness in summer 2020 and record low sea ice extent in autumn 2020 in Arctic. This resulted in unsteady Arctic air mass circulation in winter 2020/2021 and in extreme temperature anomalies and heavy snowfalls. This resulted in the consequences for public, industry and economics. The examples are the collapse of foundation of oil reservoir and oil spill into the river in Norilsk in May 2020 due to the thawing of basement and collapse of industrial building roof construction in Norilsk in winter 2020/2021 due to the heavy snowfall. There were also abnormal temperature contrasts anomalies and precipitations and tornados in winter 2020/2021 in Northern Hemisphere.

Becky Hopkins, University of Southampton – stand 11

Title: Pleistocene palaeomagnetism of IODP Expedition 379 drillcores from the Amundsen Sea, Antarctica

Abstract: The Amundsen Sea Embayment, on the Pacific margin of West Antarctica, is a region undergoing rapid ice mass loss through large ice streams such as the Thwaites and Pine Island Glaciers. To predict future behaviour, the marine sedimentary record can be used to gauge past environmental change across periods warmer or cooler than today. Here we present initial high-resolution palaeomagnetic results from a Pleistocene drift sequence recovered at IODP Expedition 379 Site U1533, located adjacent to a submarine channel on the flank of 'Resolution Drift' at 4180 m water depth. The magnetostratigraphic framework for Site U1533 has been improved through refining the location of polarity changes in the sedimentary record, and future work aims to identify shorter lived excursions not currently visible. In addition, we have constructed a relative palaeointensity (RPI) record which shows promising correlation to well-dated reference RPI records (e.g. the PISO-1500 RPI stack) developed at lower latitude sites. The RPI record has the potential to substantially refine the existing age model for Site U1533, allowing for a more precise Pleistocene chronostratigraphy that will help reconstruct oceanographic and cryospheric changes.

Lauren Rawlins, University of York – stand 12

Title: Rivers on Ice: Evolution of Supraglacial Channels on the Greenland Ice Sheet

Abstract: Throughout the satellite era, an increasingly positive trend in the extent and duration of seasonal surface melt has been observed across the Greenland Ice Sheet (GrIS), with runoff now accounting for over half of GrIS mass loss annually. To date, much of the hydrological interest on the GrIS has centred around its western margins, often limited to short windows (days) during the melt season. This study expands surface hydrological mapping to other GrIS regions, specifically its northern sector, exploring network evolution across seasonal and inter-annual timescales. Using a satellite-derived Normalised Difference Water Index (NDWI) and automatic river detection algorithm, active supraglacial drainage networks and (hydrologically-connected) saturated slush zones are delineated from Sentinel-2 and Landsat optical imagery. This work reveals the extensive nature of the northern supraglacial drainage network during the melt season, as well as the long-term