

## Programme of the 2<sup>nd</sup> International Conference PalaeoArc Processes and Palaeo-environmental changes in the Arctic: from past to present

### Virtual Conference Guide

The conference will primarily be held on Google Meet (link to the Meet session is reported for each day in the programme) in a webinar format and will cover 3 sessions per day: 2 sessions with oral presentations and 1 session with speed-talks. When entering a session, all participants will be automatically muted and their camera will be switched off for the duration of the session. Please make sure the name displayed on your Meet account is correct. There will be time allocated for questions at the end of each oral presentation. If you do have any technical questions, please contact the convenor of the session you are attending or one of the organising committee. Session convenors will introduce themselves at the beginning of each session, and their names can also be found in the conference schedule next to the session number.

### Oral Presentations

Oral presentations will be presented live or pre-recorded. Talk slots are 12 minutes long with ~3 minutes allocated for questions. The session convenors will allow speakers to share their screen according to the time schedule. Presentation should be landscape only (1920 x 1080 pixels or 25.4 x 14.2 cm or 16:9). If you prefer, you can pre-record your presentation and send it to us. You can decide either to: - have it played rather than have a live talk or - keep it as a back-up in case of technical difficulties. We suggest also sending us your presentation as .ppt or .pdf file: in case of difficulties to share your screen, we might share it for you.

### Poster Presentations

We encourage all poster presenters to send us your poster and your presentation as soon as they are ready and at the latest by Monday, 24<sup>th</sup> May. Each poster presenter will have the opportunity to speak for 3 minutes, introducing own poster in the main Google Meet room. The .pdf/.jpg poster will be upload (organisers will take care to upload your poster) in the Mighty Network platform (you will receive a file with the instruction to join the PalaeoArc 2021 Mighty Network). Each poster will have a textual Q&A chat box that will be available during the whole duration of the conference.

Light Blue:	Session introduction
Green:	keynote speaker
White:	Oral presentations
Yellow:	Poster session
Orange:	Social time

The schedule is displayed in CEST (GMT +2, UTC +2)  
Presenting Authors are underlined

<b>Monday, 24<sup>th</sup> May, 2021</b>		
	<b>Workshop SEM</b>	
10:00 – 12:00	<i>The application of analytical SEM and EDS in the Earth sciences: the Tabletop Microscopes TM4000</i>	<u>M. Tagliaferro</u>
12:00 - 14:00	BREAK	
	<b>Workshop FORAMS</b>	
14:00 - 17:00	<i>Arctic benthic foraminifera: the main species commonly used in paleoenvironmental reconstructions. Review of two common genera, Islandiella and Cassidulina</i>	<u>V.M. Gamboa</u> <u>Sojo</u> and <u>K.</u> <u>Husum</u>

Only for registered young researchers

Tuesday, 25 <sup>th</sup> May, 2021 Google Meet: <a href="https://meet.google.com/wbr-dvaj-qyf">https://meet.google.com/wbr-dvaj-qyf</a> (US) +1 314-666-2819 PIN: 956333720#		
13:30 -14:00	Welcome to the conference	A. Lyså and C. Morigi
	Presentation of the special issue of AAAR	A. Jennings
<b>Session 1</b>	<b>Theme 1: Dynamics of the terrestrial environment and landscape evolution</b>	<b>Conveners: N.K. Larsen and A. Emery</b>
14:00 - 14:30	<b>Ancient Environmental DNA – a Proxy in Quaternary Geology Invited talk</b>	<u>K.H. Kjær</u> (Univ. Copenhagen, DK)
14:30 - 14:45	<i>Lake basin formed by interaction of volcanism and land surface processes – the Lake Nordlaguna on Jan Mayen</i>	<u>E. Larsen</u>
14:45 – 15:00	<i>Geomorphology, hydrology, and chronology of Holocene jökulhlaups along the Hvítá River, Iceland: implications for Icelandic Ice Sheet dynamics</i>	<u>G.H. Wells</u>
15:00 – 15:15	<i>MIS 2 extraglacial sedimentary environment in the Vychegda - Severnaya Dvina fluvial system: proglacial lakes, rivers, and wind</i>	<u>N.E. Zaretskaya</u>
15:15 – 15:30	<i>Short-term hydroclimate changes in the Lake Bolshoye Shchuchye biogenic silica isotope record (<math>\delta^{18}\text{O}</math> diatom) linked to snow variability in the catchment</i>	<u>H. Meyer</u>
15:30 - 15:45	<i>Northern Hemisphere Holocene hydroclimate inferred from a circum-Arctic stack of lake sediment oxygen isotope records from biogenic silica (<math>\delta^{18}\text{O}_{\text{BSi}}</math>)</i>	<u>P.G. Meister</u>
15:45 – 16:00	<i>Lake water isotope gradients in arctic and subarctic Fennoscandia: implications for precipitation isotope proxy reconstructions</i>	<u>S.E. Kjellman</u>
16:00 - 16:15	BREAK	
<b>Session 2</b>	<b>Theme 1: Dynamics of the terrestrial environment and landscape evolution</b>	<b>Conveners: Í.Ö. Benediktsson and P. Sarala</b>
16:15 – 16:30	<i>A time-transgressive perspective of glacial erosion beneath the Eurasian ice sheet</i>	<u>H. Patton</u>
16:30 – 16:45	<i>Formation of Crevasse Squeeze Ridges – a case study from Trygghamna, Svalbard</i>	<u>Ó. Ingólfsson</u>
16:45 – 17:00	<i>Comparison of landform and sediment production during different glaciation phases: A case study of polythermal glaciers on Svalbard</i>	<u>L. Kasprzak</u>
17:00 – 17:15	<i>Bacterial communities associated with acid sulphate soils in the sub-Arctic</i>	<u>P. Sarala</u>
17:15 – 17:30	<i>Beach ridges of the Laptev Sea (Arctic Siberia) and their value as coastal archives</i>	<u>L. Sander</u>
17:30 - 17:40	BREAK	
17:40 - 18:36	<b>Poster session Theme 1</b>	
18:40 – 19:00	Discussion on the theme of the day	

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined

Tuesday, 25 <sup>th</sup> May, 2021 Google Meet: <a href="https://meet.google.com/wbr-dvaj-qyf">https://meet.google.com/wbr-dvaj-qyf</a> (US) +1 314-666-2819 PIN: 956333720#		
Poster Session	Theme 1: Dynamics of the terrestrial environment and landscape evolution	
17:40	Lakes and trees on the deglaciating margin of the Scandinavian ice sheet during MIS 3 in northern Sweden	<u>H. Alexanderson</u>
17:44	Applications of unmanned aerial vehicle (UAV) surveys and Structure from Motion photogrammetry in glacial and periglacial geomorphology	<u>S. Śledź</u>
17:48	Ancient permafrost of the Batagay megaslump (East Siberia) – first insights into chronostratigraphy	<u>S. Wetterich</u>
17:52	The Lateglacial and Holocene vegetation history of the central Kola Peninsula Region (NW Russia) inferred from the Lake Kamenistoe pollen record	<u>N.A. Kostromina</u>
17:56	Evolution of potentially sub-glacial Lake Manicouagan (Canada) derived from high-resolution reflection seismic data	<u>K.-F. Lenz</u>
18:00	Ice-wedge and pore-ice stable-isotope paleoclimatology at the Batagay megaslump (East Siberia)	<u>T. Opel</u>
18:04	New testate amoebae calibration data set from permafrost peatlands NW Siberia (Russia)	<u>A. Halaś</u>
18:08	Sedimentation History of the central Lena Delta, Northern Siberia	<u>G. Schwamborn</u>
18:12	Mapping and dating Holocene advances of Nansenbreen on Erdmannflya, Svalbard	<u>A.F.J.M. Missana</u>
18:16	Distribution, Characteristics and Formation of Esker Enlargements	<u>N. Dewald</u>
18:20	Record of sea-level change, fluctuations of sea-ice and post-glacial landscape transformation extracted from Svalbard beach ridge plains – case study of Bjonapynten, Svalbard	<u>M.C. Strzelecki</u>
18:24	Time scales of glacial landform creation and depositional efficiency, southern sector of Scandinavian Ice Sheet, Poland	<u>L. Kasprzak</u>
18:28	Preliminary results of pollen study from East-Siberian sea sediments	<u>N.A. Kostromina</u>
18:32	Postglacial environmental history on LGM Ice Marginal Zone in northwestern Russia as reflected by lake sediment records	<u>G. Fedorov</u>

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined

Wednesday, 26 <sup>th</sup> May, 2021 Google Meet: <a href="https://meet.google.com/jqj-tgcn-gfu">https://meet.google.com/jqj-tgcn-gfu</a> or: (US) +1 541-709-5182 PIN: 432 189 196#		
<b>Session 3</b>	<b>Theme 2: Dynamics of Arctic ice sheets, ice shelves and glaciers</b>	<b>Conveners: C. Stokes and TDB</b>
14:00 - 14:30	<b>Distally deposited tephra constrains High Arctic post-glacial sea level and glaciers - Invited talk</b>	<u>W.R. Farnsworth</u> (Univ. Iceland, IS)
14:30 - 14:45	<i>Cosmogenic nuclide inheritance in Little Ice Age moraines - a case study from Greenland</i>	<u>N.K. Larsen</u>
14:45 – 15:00	<i>Exploring the influence of frontal ablation on global glacier mass change projections</i>	<u>J.-H. Malles</u>
15:00 – 15:15	<i>Neoglacial plateau ice cap behaviour in central Spitsbergen constrained by subglacially preserved vegetation</i>	<u>A.E. Roche</u>
15:15 – 15:30	<i>Geomorphic evidence for cross-cutting palaeo-ice streams in NE-Iceland</i>	<u>Í.Ö. Benediktsson</u>
15:30 - 15:45	<i>Internal architecture of drumlins revealed by sedimentological data and ground-penetrating radar - a case study from Bustarfell, NE-Iceland</i>	<u>N. Aradóttir</u>
15:45 – 16:00	<i>Ribbed moraine in Iceland</i>	<u>E.G. Helgadóttir</u>
16:00 - 16:15	BREAK	
<b>Session 4</b>	<b>Theme 2: Dynamics of Arctic ice sheets, ice shelves and glaciers</b>	<b>Conveners: M. Winsborrow and W. Szczuciński</b>
16:15 – 16:30	<i>Dynamics of the central sector of the Cordilleran Ice Sheet through the last glacial cycle</i>	<u>H.E. Dulfer</u>
16:30 – 16:45	<i>Relative sea-level changes since the Last Glacial Maximum and Glacial Isostatic Adjustment in the Russian Arctic</i>	<u>L. Tanghua</u>
16:45 – 17:00	<i>A New Relative Sea-Level Database for Norway</i>	<u>T.R. Lakeman</u>
17:00 – 17:15	<i>The Holocene dynamics of Ryder Glacier and ice tongue in north Greenland</i>	<u>M. O'Regan</u>
17:15 – 17:30	<i>The last ice shelf of the NW Laurentide Ice Sheet</i>	<u>M.F.A. Furze</u>
17:30 – 17:45	<i>Asymmetric Growth of the Eurasian Ice Sheet during the Saalian and its Implication for Reconstructing Eemian Environments</i>	<u>H.A. Bauch</u>
17:45 - 17:55	BREAK	
17:55 - 18:35	<b>Poster session Theme 2</b>	
18:35 – 19:00	Discussion on the theme of the day	

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined

Wednesday, 26 <sup>th</sup> May, 2021 Google Meet: <a href="https://meet.google.com/jqj-tgcn-gfu">https://meet.google.com/jqj-tgcn-gfu</a> or: (US) +1 541-709-5182 PIN: 432 189 196#		
Poster Session	Theme 2: Dynamics of Arctic ice sheets, ice shelves and glaciers	
17:55	<i>A quasi-annual record of time-transgressive esker formation</i>	<u>S.J. Livingstone</u>
17:59	<i>Massive ice beds distribution and the boundaries of Late Pleistocene glaciation at Western Siberian lowlands</i>	<u>N.G. Belova</u>
18:03	<i>Decadal glacier changes using object-based image analysis</i>	<u>A. Asim</u>
18:07	<i>Initial Analysis of Sediment Cores from Lake Melville, Canada, Suggesting a Potential Late Glacial-to-Holocene Sediment Sequence</i>	<u>S. Kowalski</u>
18:11	<i>Glacier dynamics, deglaciation history and sedimentary processes in Rechercheffjorden, Svalbard</i>	<u>C.J. Thaarup</u>
18:15	<i>Provenance study of the De Long Trough sediments: defining the mineralogical signature of the East Siberian Ice Sheet</i>	<u>R. Alatarvas</u>
18:19	<i>Holocene variability of the northeastern Laurentide Ice Sheet in the Clyde Inlet area, western Baffin Bay, from radiogenic isotope records in marine sediments</i>	<u>J. Hingst</u>
18:23	<i>Past, present and future sea-level change in the Russian Arctic</i>	<u>T.A. Shaw</u>
18:27	<i>Terrigenous biomarkers in a marine sedimentary record from the Kongsfjorden (Svalbard) and inferred environmental changes during the post-Little Ice Age</i>	<u>G. Ingrosso</u>
18:31	<i>Impacts of Arctic gateways on sediment routing in northern Baffin Bay</i>	<u>E. Okuma</u>

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined

Thursday, 27 <sup>th</sup> May, 2021 Google Meet: <a href="https://meet.google.com/waj-hcte-vcs">https://meet.google.com/waj-hcte-vcs</a> or (US) +1 929-260-4690 PIN: 409 614 475#		
<b>Session 5</b>	<b>Theme 3: Dynamics of high latitude oceans and sea ice</b>	<b>Conveners:</b> <b>J. Muller and</b> <b>F. Torricella</b>
14:00 - 14:30	<b>The Cenozoic Arctic Climate and Sea Ice History. A Challenge for IODP Expedition 377 (Arctic Ocean Paleooceanography – ArcOP) - Invited talk</b>	<u>R. Stein</u> (AWI, Germany)
14:30 - 14:45	Surface warming during the MIS 11 and MIS 5 interglacials in the Arctic Ocean based on planktic foraminifera	<u>A.M. Regnier</u>
14:45 – 15:00	Bottom water temperature controlled sea ice variability at glacial abrupt climate changes in the northern Nordic Seas	<u>N. El bani Altuna</u>
15:00 – 15:15	Late Pleistocene and Holocene marine deposits of East Siberian Sea: new data	<u>V.A. Zhamoida</u> (E.S. Nosevich)
15:15 – 15:30	Speciation and stable isotope composition of sedimentary carbon and nitrogen in NW Barents Sea continental margin during last deglaciation	<u>M. Bazzaro</u>
15:30 - 15:45	Petrographic and mineralogical composition of sediments as an indicator of glacier retreat in Franz Victoria Trough: first results from core AT19-22GC	<u>E.A. Popova</u>
15:45 – 16:00	Stratigraphic revelations of the onset of Arctic/Atlantic throughflow in the Arctic Island Channels	<u>A.E Jennings</u>
16:00 - 16:15	BREAK	
<b>Session 6</b>	<b>Theme 3: Dynamics of high latitude oceans and sea ice</b>	<b>Conveners:</b> <b>A.E. Jennings and</b> <b>V.M. Gamboa Sojo</b>
16:15 – 16:30	Changes in Foraminifera Bound Nitrogen Isotopes: Implications for Quaternary Interglacial variations and Climate change	<u>S.P. Godad</u>
16:30 – 16:45	Postglacial opening of Vilkitsky Strait and its paleoceanographic impact on Kara and Laptev seas	<u>D.J. Wangner</u>
16:45 – 17:00	"Insights into Arctic shelf carbon cycling from Barents Sea sediments: Is the "rusty carbon sink" really a carbon sink?	<u>J.C. Faust</u> ( <u>C. März</u> )
17:00 – 17:15	" Water masses variability in inner Kongsfjorden (Svalbard) during 2010-2020	<u>F. De Rovere</u>
17:15 – 17:30	Atlantification along the Fram Strait at the beginning of the 20th century driven by Subpolar-Polar connections	<u>T. Tesi</u>
17:30 - 17:40	BREAK	
17:40 - 18:40	<b>Poster session Theme 3</b>	
18:40 – 19:10	Discussion on the theme of the day	

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined

Thursday, 27<sup>th</sup> May, 2021 Google Meet: <https://meet.google.com/waj-hcte-vcs> or (US) +1 929-260-4690 PIN: 409 614 475#

Poster Session	Theme 3: Dynamics of high latitude oceans and sea ice	
17:40	<i>Late Quaternary palaeoceanography and sea-ice history in the Kveithola Trough Mouth Fan (NW Barents Sea)</i>	<u>R. Melis</u>
17:44	<i>Holocene paleoceanography of Lincoln Sea and Sherard Osborn Fjord, Northern Greenland, based on benthic foraminifera and ostracodes</i>	<u>B.M. Olds</u>
17:48	<i>Age composition and distribution of winter ice cover in the north-eastern part of the Kara Sea for the period 1997-2020</i>	<u>A.G. Egorov</u> ( <u>A.V. Mishchenko</u> )
17:52	<i>First detection of microplastics in deep marine sediments from the Kveithola Trough, Barents Sea</i>	<u>L. Bronzo</u>
17:56	<i>A new long record of the Pleistocene glacial/interglacial environmental variability in the Amerasian Arctic Ocean (Mendeleev Ridge)</i>	<u>E. Taldenkova</u>
18:00	<i>Atlantic Water advection into Kandalaksha Bay (the White Sea, the European Arctic) during Holocene inferred from diatom and aquatic palynomorph assemblages</i>	<u>E.A. Agafonova</u>
18:04	<i>Paleoenvironmental changes during the last 2 ka BP in the Eastern Side of Fram Strait</i>	<u>F. Torricella</u>
18:08	<i>Deglacial and Holocene environmental variability in the western Franz Victoria Trough, Barents Sea</i>	<u>Y. Ovsepyan</u>
18:12	<i>Benthic foraminifer and ostracod assemblages in the Beaufort Sea continental shelf over the last millennia: Evidence of unprecedented changes in the last two centuries</i>	<u>J. Falardeau</u>
18:16	<i>Paleontological and sedimentological evidences in the Holocenic sedimentary record of the Bellsund Drift (Svalbard – Arctic)</i>	<u>V.M. Gamboa Sojo</u>
18:20	<i>Modern patterns in sedimentary Fe and Mn cycling within the Eurasian Arctic margin and implications for the interpretation of the Arctic sedimentary record</i>	<u>A. Tessin</u>
18:24	<i>Ventilation history of the Nordic Seas deduced from planktic and benthic radiocarbon ventilation ages</i>	<u>M.M. Telesiński</u>
18:28	<i>Deep Flow Variability Offshore South-West Svalbard (Fram Strait)</i>	<u>M. Bensi</u> ( <u>M. Rebesco</u> )
18:32	<i>Spatio-temporal Ba/Ca variations of planktic foraminifera (<i>Neogloboquadrina pachyderma</i>) in the Arctic Ocean</i>	<u>B.-J. Jong</u>
18:36	<i>Sedimentary ancient DNA - a new proxy to investigate the impact of environmental change on past and present biodiversity in Nordic Seas (NEEDED) - an overview of the research project</i>	<u>D. Devedra</u>

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined



Friday, 28<sup>th</sup> May, 2021 Google Meet: <https://meet.google.com/gst-swej-pqx> or (US) +1 573-559-1312  
PIN: 514 725 149#

<b>Session 7</b>	<b>Theme 4: Climatic response to, and interaction between, the different parts of the Arctic system</b>	<b>Conveners: M. O'Regan and K. Gariboldi</b>
14:00 - 14:30	<b>Labrador Sea ocean circulation and west Greenland Ice Sheet extent during the last glaciation - Invited talk</b>	<u>M.-S. Seidenkrantz</u> (Aarhus Univ., DK)
14:30 - 14:45	<i>Low salinity in the western Fram Strait (79°N) at 12.7 - 10.2 ka related to NE Greenland continental shelf deglaciation</i>	<u>R.F. Spielhagen</u>
14:45 – 15:00	<i>Freshwater and riverine input in Arctic system: insight from biomarker proxy</i>	<u>A. Singh</u>
15:00 – 15:15	<i>Last century sediment accumulation rates in fjords of Svalbard (Arctic) – underrated hot spots for organic carbon burial</i>	<u>W. Szczuciński</u>
15:15 – 15:30	<i>The impact of air temperature on aeolian deposition rates in periglacial conditions (Ebba Valley, central Spitsbergen)</i>	<u>K.G. Rymer</u>
15:30 - 15:45	<i>Testing micro- and nannofossil bioevent correlations in the central Arctic Ocean: is the Pleistocene biostratigraphy consistent?</i>	<u>F. Vermassen</u>
15:45 – 16:00	<i>Mean summer insolation and sea level as natural drivers of the Arctic climate and sea-ice cover</i>	<u>C. Hillaire-Marcel</u>
16:00 - 16:15	BREAK	
<b>Session 8</b>	<b>Theme 4: Climatic response to, and interaction between, the different parts of the Arctic system and general discussion</b>	<b>Conveners: A. Lyså and C. Morigi</b>
16:15 - 16:45	<b>Tracing past methane emissions in the Arctic Ocean - Invited talk</b>	<u>G. Panieri</u> (CAGE, Norway)
16:45 – 17:00	<i>Modelling methane production and emission from thawing sub-sea permafrost on the warming Arctic Shelf</i>	<u>E. Ridolfi</u>
17:00 – 17:15	<i>Geo-Environmental Response to Present Climate Warming in Subarctic East Siberia</i>	<u>J. Chlachula</u>
17:15 – 17:30	<i>Has the Svalbard archipelago reached a climate tipping point? Evidence from an ice core study</i>	<u>A. Spolaor</u>
17:30 - 17:40	BREAK	
17:40 – 18:30	General discussion, Best student Poster /Talk awards and presentation PaleoArc 2022	

The schedule is displayed in CEST (GMT +2, UTC +2)

Presenting Authors are underlined