

# Book of Sessions – Open for Abstract Submissions

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## 1.0 Oceans

### 1.0.1 The shifting seascape of Central Arctic Ocean governance

**Convener:**

Pauline Pic

**Co-convener:**

Mathieu Landriault

**Pauline Pic<sup>1</sup>, Mathieu Landriault<sup>2</sup>**

**<sup>1</sup>Laval University, <sup>2</sup>École nationale d'administration publique**

Session description

Efforts and initiatives have intensified in recent years to regulate, map and explore the Central Arctic Ocean (CAO). This space is evolving rapidly, sea-ice free Summers now being on the horizon. Numerous actors have also demonstrated a strong interest in the region: Arctic states, non-arctic states, but also non-state actors. Issues range from a rapidly changing environment to resource management or continental shelves delimitation.

Far from being a remote and marginal space, the Central Arctic Ocean is the subject of a renewed attention: the fisheries agreement preventing commercial fishing serves as a good example. More generally, this space attracts scientific interest – in 2019, MOSAIC was for example the largest expedition to take place in this ocean. It also attracts political attention when it comes to continental shelves. Additionally, the CAO, being part of the high seas, is subject to global legal instruments like UNCLOS and the recently negotiated BBNJ treaty.

This session will convey researchers investigating state and non-state actors' interests in the CAO. Attention will also be devoted to analysis focusing on the evolution of governance institutions for the CAO as well as possible comparative cases that could enlighten our perception of the legal regime and potential governance mechanisms for this region.

Unique Session ID = 448

## 1.3 Marine litter and plastic pollution

### 1.3.1 Monitoring of plastic pollution in the Arctic, is current research answering the needs of stakeholders?

**Convener:**

France Collard

**Co-conveners:**

Jannike Falk-Andersson

Amy Lusher

Marthe L. Haarr

Helene Svendsen

**France Collard<sup>1</sup>, Jannike Falk-Andersson<sup>1</sup>, Amy Lusher<sup>1</sup>, Marthe L. Haarr<sup>2</sup>, Helene Svendsen<sup>3</sup>**  
**<sup>1</sup>Norwegian Institute for Water Research, <sup>2</sup>Salt Lofoten AS, <sup>3</sup>GRID-Arendal**

Session description

Monitoring of plastic pollution and littering is important to understand the magnitude of the problem and identify potential sources to take appropriate mitigative actions. Monitoring efforts are in place in some areas of the Arctic today, but there are challenges related to harmonization of methods and logistical and practical challenges of monitoring due to the characteristics of the Arctic (snow, ice, rough weather conditions, remoteness). International obligations call for data that are accessible, comparable, representative and can detect trends, which is challenging to achieve in Arctic areas. There is little research on whether the data collected is meeting the needs of stakeholders and can support them in developing policies that will reduce the amount of litter and plastic pollution in the Arctic. Particularly, the work performed by the Arctic Monitoring and Assessment Programme (AMAP) working groups will serve as a basis for discussion in this session, together with additional studies integrated in monitoring programmes or focusing on the environmental compartments set a priority 1 for monitoring of macro- and microplastics in the Arctic by the AMAP Monitoring Plan. Finally, the involvement of communities in such monitoring programmes is of high importance and collaborations between scientists and Indigenous People are needed, as a win-win partnership.

Unique Session ID = 608



## 1.4 Emergency prevention and preparedness

### 1.4.1 Enhancing Accessibility and Advancing Crisis Management Education and Training

**Convener:**

Ensieh Roud

**Co-convener:**

Rune Elvegård

**Ensieh Roud<sup>1</sup>, Rune Elvegård<sup>2</sup>**

**<sup>1</sup>Nord University, <sup>2</sup>Nord**

#### Session description

In this session, we address the unique challenges of crisis management in the Arctic and maritime preparedness, recognizing the shared complexities and the crucial need for advanced and flexible education. In the Arctic, crisis response is compounded by extreme weather conditions, vast distances, and sparse populations. There is a lack of robust research and education on crisis management programs and courses in higher education which leaves a gap that educators must bridge, seeking out ways to provide and assess the essential abilities for student success and industry development in the Arctic. Therefore, advancing crisis management education quality is important to all institutions, citizens and communities in the Arctic.

The Arctic witnesses a surge in maritime traffic, demanding expertise in rescue operations and marine environmental response. This includes preventive and responsive measures for the intricate, cold, and environmentally fragile Arctic regions. This session is a platform to promote accessible education in crisis preparedness and safety for both the Arctic and maritime sectors. We will delve into the demand for knowledge, skills, and competencies in areas such as search and rescue, oil spill preparedness, and environmental considerations in the Arctic.

Collaboration is pivotal to crisis preparedness. We will discuss the significance of cooperation between industry, emergency services, maritime colleges, and universities. Our goal is to enhance education, promote best practices, and strengthen collaboration in the Arctic. This session is connected to CCArctic project and other activities within The UArctic Thematic Network on Arctic Safety and Security to fostering collaboration and knowledge sharing.

Unique Session ID = 670

## **1.4.2 Adaptive governance in public health and emergency preparedness: Insights and tangible examples from emergency and pandemic planning in the Arctic**

**Convener:**

Alison Perrin

**Co-convener:**

Jonny Lennart Brodersen

**Alison Perrin<sup>1</sup>, Jonny Lennart Brodersen<sup>2</sup>**

**<sup>1</sup>Yukon University, <sup>2</sup>Northern Norway Regional Health Authority**

### Session description

Within the Arctic region there are complex intergovernmental dynamics between local, regional, national, and Indigenous governments. There are also numerous challenges faced in emergency planning and providing health care in austere environments with scattered and remote populations, sparse infrastructure, and large climatic variations. Effective emergency planning and response requires good relationships, collaboration, and communication to ensure Arctic communities are prepared for and able to navigate complex, and sometimes unforeseen, emergencies. The COVID-19 pandemic was an example of a prolonged emergency that presented new challenges and tested existing interjurisdictional relationships.

The pandemic highlighted the importance of considering the unique needs of Indigenous communities and respecting Indigenous sovereignty within emergency responses. Arctic communities will continue to face emergencies instigated by various causes including wildfires, flooding, landslides, industrial accidents, pandemics, and substance use, amongst others. At the same time, there are numerous logistical challenges in providing emergency healthcare to remote Arctic populations, both resident and visitors, particularly in situations such as a mass evacuation.

This session explores the question, are Arctic institutions better prepared for the next pandemic or other large-scale emergencies and what are they doing to provide services throughout their jurisdictions during emergencies? Through case studies of pandemic or other emergency responses in the Arctic, we will consider lessons learned and identified, and gain insight into challenges and enablers in adaptive and collaborative governance. Through tangible examples like the Norwegian Blood Preparedness Project, we explore how Arctic regions are implementing innovative approaches to providing services in remote environments.

Unique Session ID = 679

## 1.5 Sustainable shipping and risk reduction

### 1.5.1 Collaboration Complexity in Nuclear Emergency Preparedness in the Maritime Arctic

**Convener:**

Andrey Kazakov

**Co-conveners:**

Natalia Andreassen

Rune Elvegård

**Andrey Kazakov<sup>1</sup>, Natalia Andreassen<sup>2</sup>, Rune Elvegård<sup>3</sup>**

**<sup>1</sup>High North Center at Nord University Business School, <sup>2</sup>Nord University, <sup>3</sup>Nord University, Nordlab**

Session description

The increased maritime transportation, flow of goods, and populations changes the risk picture in the Arctic. A recent sharp increase in nuclear- propelled vessels and ships transporting spent nuclear fuel and radioactive materials adds new uncertainties into risk assessments, risk perceptions, and challenges of inter-sectoral collaboration complexity in case of response to maritime radiation emergencies in the Arctic.

The main goal of the session is to strengthen interdisciplinary network with global research and professional community working in the field of nuclear disasters. The session will gather researchers and professionals working with nuclear safety and security in the sea. Session participants will represent researchers working in social and natural sciences from different countries, professionals, and local and national authorities and representatives from other organisations, responsible for nuclear safety at sea.

During the session we plan to discuss the questions, connected to the following field:

- Building shared knowledge on collaboration competences within Arctic maritime nuclear emergency preparedness
- Risk evaluation for safety and complexity in the Arctic
- Visualization of risk evaluation for better safety in the Arctic
- Risk awareness of nuclear emergencies

Unique Session ID = 671

## 2.0 Climate and environment

### 2.0.1 Climate and Environment in Manitoba: Indigenous Perspectives, Knowledge Transmission, and Decolonization

**Convener:**

Jarvis Brownlie

**Co-conveners:**

Ramona Neckoway

Barbara Filion

Roewan Crowe

Aimée Craft

**Jarvis Brownlie<sup>1</sup>, Ramona Neckoway<sup>2</sup>, Barbara Filion<sup>3</sup>, Roewan Crowe<sup>4</sup>, Aimée Craft<sup>5</sup>**  
**<sup>1</sup>University of Manitoba, <sup>2</sup>University College of the North, <sup>3</sup>Canadian Commission for UNESCO, <sup>4</sup>University of Winnipeg, <sup>5</sup>University of Ottawa**

Session description

In collaboration with University of Manitoba, University College of the North, and the Canadian Commission for UNESCO, our panel, composed of interdisciplinary experts, will explore the profound interconnections and relationships between the environment, particularly waterways altered by hydropower, decolonization, and Indigenous languages and knowledge transmission. In a roundtable format based on brief presentations followed by a conversation among all presenters, we will be both using and discussing decolonizing methodologies to explore these themes.

Drawing from engagements with Cree and Anishinaabe laws and traditional ecological knowledge, we will delve into the decolonization of water, examining oral histories, and the physical and spiritual relationships Indigenous communities maintain with their waterways. At the same time, in connection with the United Nations International Decade of Indigenous Languages, presenters will examine how Indigenous languages, particularly in northern regions, are pivotal for transmitting knowledge about biodiversity, conservation, and sustainable living. Our overarching aim is to highlight the importance of decolonizing methodologies and the significance of linguistic and biological diversity in stewardship. At the same time, we underscore the need for more attention to Indigenous knowledge and voices and more inclusive, Indigenous-led approaches to climate change impacts and strategies.

Unique Session ID = 675

## 2.0.2 Relics of climate change: Icy futures in a melting world

**Convener:**

Katherine Burlingame

**Co-convener:**

Póra Pétursdóttir

**Katherine Burlingame, Póra Pétursdóttir**  
**University of Oslo**

Session description

The rapid melting of glaciers around the globe and the receding ice sheets of Greenland and Antarctica have become the token images of climate change. While the cracking, collapsing, and calving events of melting ice are visceral, tangible manifestations, ice itself carries a wide range of symbolic meaning and layers of feeling, particularly for the human and more-than-human beings whose lives are tethered to icy landscapes. Ice loss, however, is predominantly measured, interpreted, and communicated strictly as natural scientific data, while the expected changes in human livelihoods and environs as well as the fundamental changes in perspective required to tackle the disappearance of icy worlds tend to be most effectively imagined, grasped, and articulated by the humanities and arts. While daunting graphs and statistics showing alterations in numbers, degrees, levels, etc. are of great significance, they have failed in their efforts to reach out and connect with broader audiences because of the difficulty in capturing and evoking the affective and emotional dimensions that emerge from the loss of ice. In this session, we therefore seek papers that engage with ice outside of strict scientific parameters; for example, as a form of natural heritage, as relic, as memory, as safety or danger, including perspectives from local populations reliant on ice with an emphasis on indigenous perceptions and narratives of change. We particularly welcome papers that offer interdisciplinary, collaborative approaches between the humanities and natural sciences that highlight debates on temporal, spatial, and relational dimensions of more-than-human entanglements in icy-scapes.

Unique Session ID = 410

### **2.0.3 Extreme changes in Arctic terrestrial hydrology: Long-term insights from observations and proxies to better inform on droughts and floods**

**Convener:**

Irina Panyushkina

**Co-convener:**

Tetsuya Hiyama  
Hotaek Park

**Irina Panyushkina<sup>1</sup>, Tetsuya Hiyama<sup>2</sup>, Hotaek Park<sup>3</sup>**

**<sup>1</sup>University of Arizona, <sup>2</sup>Institute for Space-Earth Environmental Research, Nagoya University, <sup>3</sup>Institute of Arctic Climate and Environment Research, Japan Agency for Marine-Earth Science and Technology (JAMSTEC)**

Session description

Arctic amplification leads to a wide range of climatic variability that affects terrestrial hydrology, including floods and droughts. The session will focus on linking hydrological modeling concepts with practical aspects of climate change adaptation at high latitudes. Submissions on proxy records of past hydrological regimes (e.g., tree rings, peat and lacustrine sediments, historical accounts, oral lore tradition, etc.) are welcome to include the extended time frame of ongoing hydrological changes and estimate upper limits of its magnitude. We are particularly interested in transdisciplinary case studies demonstrating how water balance modeling outputs at the basin scale and smaller scales can be used in water-proxy modeling. How can various types of hydrological proxies be combined and complemented to overcome temporal and spatial limitations to understanding projected changes in hydrological regimes? Finally, we are looking for presentations that provide insight into the feedback between long-term hydrological variability in the runoff, precipitation, and permafrost thaw in the Arctic and mid-latitudes. Particular attention will be devoted to the spatial patterns of gauged and predicted changes. This information is essential for understanding and managing the risks associated with extreme droughts, floods, and natural disasters, and for natural resource planning and management.

This session includes both oral and poster presentations. Oral presentations will be followed by a 20-minute discussion moderated by the conveners, during which the presenters will address comments from the audience and fellow presenters, and give the opportunity to poster presenters to highlight their posters.

Unique Session ID = 462

## **2.04 Advancing Climate Knowledge in the Arctic: Best practices, Gaps, and Collaborative efforts for Community Informed Climate Risk Decision-Making**

**Convener:**

Erik Sandquist

**Co-convener:**

Priscilla Mooney

**Erik Sandquist<sup>1</sup>, Priscilla Mooney<sup>2</sup>**

**<sup>1</sup>University of Bergen, <sup>2</sup>NORCE Norwegian Research Centre and the Bjerknes Centre for Climate Research**

Session description

The Arctic is experiencing climate change at a pace far greater than anywhere else on the planet. Consequently, the people in the arctic regions are already experiencing the challenges of climate change. Responding to these challenges demands reliable climate information that is relevant for the people living in the region and will enable them to make informed climate risk decisions. This is a key motivation for several research projects and large scale collaborative research infrastructures across institutions and states. The improvements in understanding regional climate at spatial and temporal scales as well as societies ability to effectively demand and use climate information are being made, but there are still critical knowledge gaps that need to be both identified and addressed urgently, and in a concerted way. This includes more involvement of citizens and other end-users through citizen science, and user-led research activities. This is highlighted in the research and innovation strategies of the Arctic Council Members States but also of the European Unions draft Horizon Europe Strategic Plan (2025 – 2027).

The session is organized by an experienced panel that will be expanded by inviting funding experts from national and European funding landscapes, Arctic stakeholders, community representatives and leading researchers to take stock of scientific advancements as well as call attention to uncertainties. We welcome contributions from researchers and stakeholders on social and environmental impacts of climate change. The session will give priority to and especially call for contributions from early career scientists and young people living the Arctic.

Unique Session ID = 577

## **2.05 Arctic Resilience: socio-ecological change and adaptive capacity needs**

**Convener:**

Jarkko Saarinen

**Co-conveners:**

Elina Lehtomäki

Satu Nätti

Anni-Siiri Länsman

**Jarkko Saarinen, Elina Lehtomäki, Satu Nätti, Anni-Siiri Länsman**  
**University of Oulu**

Session description

The Intergovernmental Panel on Climate Change (IPCC) has estimated that the Arctic and northern regions will experience the highest rate of warming compared with other regions of the world. The latest evidence demonstrates that the Arctic region has warmed nearly four times faster than the globe since the early 1980s, and that even if we manage to cut carbon emissions and reach the Paris Agreement limit of global warming to 1.5 C, the Arctic Ocean may lose all summer sea ice already in 2030s. Therefore, while we strive to take urgent steps to mitigate critical socio-ecological changes and deepening impacts to our environment and daily lives, there is an imminent need to 'Adapt for our Future'. In recent discussions this adaptation view has highlighted the need for resilience thinking and building regarding a sustainable future. In this respect, resilience has become a paradigm term and idea in the international scientific and policy-making realms that seek to make sense of evolving, large-scale global changes and build local and regional capacities for adapting to them and continuing to support well-being and development. This session will focus on the Arctic resilience and adaptive capacity needs in the context of ongoing global climate change and related processes and impacts. Purpose is to discuss on the Arctic (transdisciplinary) resilience research and needs in various scales and perspectives, covering (but not limited to) socio-ecological, individual, community, organizational/institutional, livelihoods and regional contexts.

Unique Session ID = 592



## 2.1 Current and future climate change impacts in the Arctic

### 2.1.1 Climate Change and Mental Health: ‘Ecological grief’ and other perceptions of changing environment across the Arctic

**Convener:**

Jeevan Toor

**Co-conveners:**

Daria Morgounova Schwalbe

Alexander Drossos

Naja Carina Steenholdt

**Jeevan Toor<sup>1</sup>, Daria Morgounova Schwalbe<sup>2</sup>, Alexander Drossos<sup>3</sup>, Naja Carina Steenholdt<sup>4</sup>**  
**<sup>1</sup>University College London, <sup>2</sup>University of Copenhagen, <sup>3</sup>McMaster University, <sup>4</sup>University of Southern Denmark**

Session description

Climate change is often perceived as a threat to global and human health, particularly in low-income and disadvantaged communities. In Arctic regions, rising temperatures occur at four times the global average. Dominant narratives in literature and political debates are that climate change is a major threat and that these communities experience ‘ecological ruin’ and mental distress, producing a uniform and Eurocentric picture of the Arctic, leading to potential victimization of Indigenous Peoples. By extension, the relationship between climate change and mental health has emerged as a specific area of concern, with recent work correlating it to the “epidemic” of suicides in circumpolar communities. Yet, not all Arctic communities experience the impact of climate change similarly. Different histories, landscapes, and social locations produce different narratives and dissimilar perceptions of environmental change and mental distress. We seek to compare perceptions of changing environments from Indigenous communities across the Arctic – anchored in Indigenous concepts and ways of knowing.

This session intends to bring together numerous experts to discuss current research and generate future interventions to better support the mental health of Indigenous Peoples in the Arctic, through the lens of Climate Change. We ask, ‘What do the local communities talk about?’ and ‘How can we explain that climate change is affecting people and communities differently, emotionally and psychologically?’ We invite papers that explore both positive and negative consequences of physical and ecological domains of environment and climate change, and/or which aim to rethink the conceptual and methodological approaches to studies of climate change.

Unique Session ID = 669

## 2.1.2 Permafrost Thaw, Infrastructure and Indigenous Communities: Lessons from Alaska

**Convener:**

Olaf Kuhlke

**Co-convener:**

Steve Rowell

**Olaf Kuhlke, Steve Rowell**  
**Minneapolis College of Art and Design**

### Session description

The Arctic has been experiencing alarming warming rates, with temperatures rising three to four times faster than the global average. This profound transformation of the Arctic ecosystem has far-reaching consequences, including threats to Indigenous communities and a substantial impact on the overall global climate. Permafrost thaw not only undermines essential infrastructure like buildings and roads but also releases long-frozen carbon in the form of CO<sub>2</sub> and methane, thereby exacerbating global climate change. This panel discussion introduces two initiatives that work in Alaska to examine the impact of permafrost thaw on indigenous and non-indigenous infrastructure:

First, the Permafrost Pathways project — a collaborative initiative that strives to address some of the world's most urgent challenges. This project brings together experts in climate science, policy development, and environmental justice. Their mission is to advance our scientific understanding of permafrost thaw, provide valuable insights for adaptation and mitigation strategies, and ensure that carbon emissions are appropriately factored into global climate policies. A central focus of the initiative is to engage and collaborate with Alaska Native communities affected by permafrost thaw, empowering them in the development of climate adaptation plans tailored to their unique needs.

Second, the Defense Resiliency Platform (DRP) is a multi-institutional effort to visualize and contextualize some of the most critical threats to infrastructure in permafrost environments. We will share findings of field research conducted during the summer of 2023 in various Alaskan communities. The research highlights the significant and immediate consequences of permafrost thaw on Indigenous villages' public and private infrastructure.

Unique Session ID = 676

### **2.1.3 The Good, Bad, and the Ugly: Earth-system interventions to keep the Arctic Frozen**

**Convener:**

Tiina Kurvits

**Co-convener:**

John Moore

**Tiina Kurvits<sup>1</sup>, John Moore<sup>2</sup>**

**<sup>1</sup>GRID-Arendal, <sup>2</sup>Arctic Centre/University of Lapland**

Session description

The Arctic is warming four times faster than the global average rate. Because the region contains several crucial tipping points, this warming not only causes major changes in local livelihoods and ecosystems, but also poses a serious threat to the rest of the world through massive sea level rise from melting ice caps, and rapid methane release from thawing permafrost.

Given the urgency of the situation, a range of climate action measures been suggested to slow down, halt, or even reverse the effects of climate change in the Arctic and northern regions – and to keep the Arctic frozen. Yet currently there is a lack of clear understanding of what options could actually be feasible, timely, and deployable at scale, while still bringing positive benefits and low risk to local communities, local economies, and Arctic environments.

This session invites speakers to present their latest research and developments in the field of earth-system interventions designed to keep the Arctic frozen.

We welcome talk submissions covering advances in theoretical approaches and emerging technologies through to the consideration of societal, ethical and governance issues and challenges.

This session is co-organised by GRID-Arendal, the Arctic Centre/University of Lapland and the UArctic Secretariat. Please join us for a thoughtful and thought-provoking session!

Unique Session ID = 501

## 2.2 Social impacts of Arctic climate change

### 2.2.1 Gazing at melting ice? Arctic tourism in transition, multi-sensory encounters in changing Arctic landscapes

**Convener:**

Thora Herrmann<sup>1</sup>

**Co-conveners:**

Halvor Dannevig<sup>2</sup>

Vesa-Pekka Herva<sup>1</sup>

Kristin Løseth<sup>2</sup>

Julia Olsen<sup>3</sup>

Albina Pashkevich<sup>4</sup>

Margareta Pintér<sup>5</sup>

Carina Ren<sup>6</sup>

Alix Varnajot<sup>1</sup>

<sup>1</sup>University of Oulu, <sup>2</sup>Western Norway Research Institute, <sup>3</sup>Nordland Research Institute, <sup>4</sup>Center for Tourism and Leisure Research, Dalarna University, <sup>5</sup>The SAXO Institute, Faculty of Humanities, University of Copenhagen, <sup>6</sup>The Techno-Anthropology Lab, Aalborg University

Session description

Tourism has been identified as one of the main drivers for economic development in Arctic communities in the Nordic region. While Arctic tourism is growing, the region is also undergoing rapid and dramatic climate changes, a phenomenon known as Arctic amplification (Rantanen et al, 2022). Increasing tourism flows combined with climate and environmental changes provide both opportunities and challenges to local communities, the wider tourism industry and governance. In addition, the rapidly changing socio-ecological landscapes of remote Arctic areas are a catalyst of multisensory interactions that shed light on processes and ways in which these places are interacted with-, experienced, and represented.

This panel will discuss how changing tourism patterns combined with rapid climate and environmental changes are shaping the Arctic region. What are the implications of these changes for communities, product and destination development, the tourist experience and visitor management? We will discuss notions of place, presence, absence, in-betweenness, enchantment and disenchantment, ecological grief, traumascapes, Arctification, dark tourism, human-object relations, relational heritage, and tangibility/intangibility. We invite scholars, but also practitioners, and panelists from the tourist industry to share and discuss their experiences in relation to the rapidly changing environment and multiple responses from Arctic tourism. The session takes a multidisciplinary perspective and welcomes contributions that delve into the relationships between last chance tourism, place attachment and Arctic futures.

## 2.2.2 'Carving out Climate Testimony: exploring Inuit youth leadership in climate art-activism'

**Convener:**

Jen Bagelman

**Jen Bagelman**  
**Newcastle University**

### Session description

This session reflects on our CINUK Inuit-led project 'Carving out Climate Testimony' centrally exploring: how does climate change impact Inuit youth and what are the resilience factors that enhance mental health and wellbeing? Our project is especially interested in innovative forms of adaptation key to continued livelihood and cultural continuity. As noted by National Inuit Strategy on Research (NISR), this question of health remains a vital Inuit research priority (ITK, 2018:5). This talk reflects on our co-developed Inuit-specific storytelling methodologies for documenting indicators and determinants of Inuit community health and resilience. We work with an Inuit understanding of 'storytelling' and sharing (Inuktitut: Unikkausivut) which refers to verbal but also artistic expressions (Bertrand, 2019) and we ground this work in Tuktoyatkuk.

Unique Session ID = 436

## 2.3 Impacts of human activities on the Arctic environments and biodiversity

### 2.3.1 Cruise tourism in the Arctic: sustainable approaches, community impacts, and the role of polar ambassadorship

**Convener:**

Roberto Rivas Hermann

**Co-conveners:**

James Powell

Annette Scheepstra

Anne Choquet-Sauvin

Tony Cabus

**Roberto Rivas Hermann<sup>1</sup>, James Powell<sup>2</sup>, Annette Scheepstra<sup>3</sup>, Anne Choquet-Sauvin<sup>4</sup>, Tony Cabus<sup>5</sup>**

**<sup>1</sup>Nord universitet/ Centre for High North Logistics, <sup>2</sup>University of Alaska Southeast, Alaska Coastal RainForest Center, <sup>3</sup>University of Groningen, <sup>4</sup>University of Western-Brittany, Centre for Law and Economy of the Sea, AMURE, <sup>5</sup>University of Kiel, Walther Schücking Institute for International Law**

Session description

This session will explore the multifaceted impact of the booming cruise tourism in the Arctic. We aim to unpack both the beneficial and negative impacts on coastal communities in the Arctic and adjacent waters, considering a wide range of factors from environmental footprint to social implications and possible pro-environmental and economic trade-offs.

Our discussion will extend beyond just identifying challenges; we seek to critically explore solutions through the lens of 'Sustainable Cruise Tourism.' This includes examination of existing regulatory frameworks and their adequacy, the adaptation needed in Arctic ports facing increased tourism, as well as the balance that must be struck between economic gains and sustainability.

Adding another layer to this discourse is the emerging concept of 'polar ambassadorship.' We will discuss the claim and meaning that tourists, upon experiencing the uniqueness of the Arctic, become ambassadors and explore the behavioral impact of the experiences of Arctic tourists. This involves both theoretical discussions and empirical studies, welcoming contributions from diverse academic disciplines such as history, psychology, tourism studies, law, human geography, and anthropology.

The session aims to engage not just academics but also local decision-makers, indigenous organizations, and the general public in co-producing research approaches. We encourage data-driven, community-defined indicators to inform policies that enhance local adaptive capacities. The goal is to foster a nuanced dialogue around the responsibilities, challenges, and opportunities that come with cruise tourism in the Arctic.

Unique Session ID = 674

### **2.3.2 Integrating Scientific, Societal and Engineering Approaches to assess Water Resources Management in a Changing Arctic**

**Convener:**

Epari Ritesh Patro

**Co-conveners:**

Ali Torabi Haghighi

Anu Soikkeli

Navinder Singh

Gunnar Hellström

Prof. Anders Andersson

**Epari Ritesh Patro<sup>1</sup>, Ali Torabi Haghighi<sup>2</sup>, Anu Soikkeli<sup>3</sup>, Navinder Singh<sup>4</sup>, Gunnar Hellström<sup>5</sup>, Prof. Anders Andersson<sup>6</sup>**

<sup>1</sup>University of Oulu, Finland, <sup>2</sup>Water, Energy and Environmental Engineering Unit, Faculty of Technology, University of Oulu, Finland., <sup>3</sup>Oulu School of Architecture, Faculty of Technology, University of Oulu, Finland, <sup>4</sup>Department of Wildlife, Fish and Environmental Studies, Swedish University of Agricultural Sciences, Umeå, Sweden, <sup>5</sup>Department of Engineering Sciences and Mathematics, Luleå University of Technology, Luleå, Sweden., <sup>6</sup>Department of Engineering Sciences and Mathematics, Luleå University of Technology, Luleå, Sweden

#### Session description

Water plays a critical role in sustaining human health, food and energy security, and ecosystem services. Infrastructure such as dams, reservoirs, levees, canals, and power lines play a key role in the water-energy-food nexus by providing services such as irrigation, water supply, electricity, flood control, and transportation. However, this infrastructure often creates negative externalities that disrupt ecosystem services (e.g., fish migration, recreation etc.) which are critical for people. Rethinking of management strategies for water, energy, and human networks is key for meeting future demands under changing socio-economic and climate conditions. Modelling water, energy, and human networks, and their interconnections across spatial and temporal scales and heterogeneous future scenarios is essential to inform systems governance and operations. Successful management of water resources requires an integrative understanding of coupled human and natural system components. This session focuses on research that integrates social, scientific, and engineering approaches to understand and improve the design, implementation, and impact of water-related infrastructure and management.

The goals of this session are to engage researchers from many disciplines in this conversation and share excellent case studies and frameworks within the research community. This session seeks input from inter- and transdisciplinary scientists who have developed toolkits, frameworks, smart practices, and other methods or case studies of translating science into action.

Unique Session ID = 600

### **2.3.3 Challenges and Opportunities for Biodiversity in the Arctic Cultural Landscape**

**Convener:**

Anders Nielsen

**Anders Nielsen  
Norwegian Institute for Bioeconomy Research (NIBIO)**

#### Session description

The cultural landscape requires human impact to sustain its natural, and cultural, values. Land-use change, including urban development, agricultural intensification and abandonment alters ecosystems and the biodiversity and processes they possess. On top of this, climate change is altering species distributions and creates novel ecosystems, in particular in the north, where ongoing, and future, temperature increase is expected to be most pronounced. In this session we will present case studies focusing on current challenges for the biodiversity in the arctic cultural landscape, as well as concrete mitigation measures and targeted management options facilitating biodiversity conservation. It will cover practical management of species rich plant communities in semi-natural grasslands and coastal heathlands, also facilitating pollinator diversity, studies on keystone species, e.g., fungi, and projects assessing forage quality and quantity for grassing livestock. We welcome presentations focusing on both semi-natural meadows and out-field grassing areas, ecosystem service provision to agricultural production systems (e.g., pest control and pollinators) and projects focusing on the interaction between food production (livestock and crop production systems), and biodiversity in general.

Unique Session ID = 444



### **2.3.4 Managing change in Arctic coastal communities: resources, practices, and livelihoods**

**Convener:**

Grete Hovelsrud

**Co-convener:**

Anna G. Sveinsdóttir

**Grete Hovelsrud, Anna G. Sveinsdóttir  
Nordland Research Institute**

#### Session description

This session explores approaches that will contribute to an understanding how changes in the marine environmental affect communities, livelihoods, and managerial practices. Climate change combined with pressures and opportunities from fishing, tourism, shipping, and changing socio-economic conditions have consequences for Arctic fjords and coastal communities. One question is how to facilitate recurring interactions between scientists and local actors, communities and policy makers work together to create knowledge that can be used for adapting to the rapid changes in the Arctic, and for assessing options for adaptive co-management. The session will address how to facilitate joint learning about societal challenges and opportunities related to changing biodiversity and climate in Arctic fjord systems and support management at the local and national levels. In this session, we share some of the project insights and learnings concerning co-production of knowledge with local actors around the fjords Nuup Kangerlua, Greenland; Isfjorden, Svalbard; and Porsangerfjorden, Norway. While each social-ecological fjord system faces its unique management challenges, there are several common concerns, including changing biodiversity, the importance of policy decisions and regulations as shapers of change, and increasing competition for space. We invite presentations that may contribute with new knowledge and ideas on how to further this challenging, but promising approach. The session is organized by a team of researchers from the EU-funded inter- and transdisciplinary project The Future of Arctic Coastal Ecosystems – Identifying Transitions in fjord systems and adjacent coastal areas (FACE-IT) which addresses interacting changes of marine biodiversity, ecosystems, nature-based tourism, and local livelihoods.

Unique Session ID = 479

### 2.3.5 Multispecies relations in the Arctic

**Convener:**

Virga Popovaite

**Co-conveners:**

Emily Höckert

Hin Hoarau Heemstra

**Virga Popovaite<sup>1</sup>, Emily Höckert<sup>2</sup>, Hin Hoarau Heemstra<sup>1</sup>**

**<sup>1</sup>Nord University, <sup>2</sup>University of Lapland**

Session description

In early June 2023, a minke whale tragically died after becoming trapped in a research facility in Lofoten during a storm. The incident resulted in the temporary suspension of a Norwegian-American research project focused on measuring the hearing capabilities of minke whales. This story is only one of many devastating reports highlighting the ongoing ecological crisis and loss of biodiversity. It calls for slowing down and prompts us to critically reflect on how human activities, such as research, tourism, fishing, agricultural activities, and mining are shaping the wellbeing of not only humans but of all other species in the Arctic as well.

The recent emergence of Posthumanist and New materialist streams of discussions are challenging us to expand our focus to multispecies communities and to explore human–nature connectedness and interdependency in the search for sustainability transformations. This session takes this challenge by welcoming conceptual and methodological papers, case studies, and art experiments that can help us to attend to more-than-human relations in different ways. It offers an interdisciplinary chance to gather around the common matters of care (Puig de la Bellacasa, 2017), notice the interwoven histories of multispecies (Tsing 2015), and embrace the staying with the trouble (Haraway 2016). We invite scholars with critical perspectives on multispecies wellbeing and justice, more-than-human entanglements, and how these reciprocal encounters are shaping the future of the Arctic.

Unique Session ID = 530

## 2.4 Adaptation to climate change

### 2.4.1 Framing adaptation and enhancing resilience to climate change in the Arctic through the lens of Indigenous knowledge

**Convener:**

Marina Tonkopeeva

**Co-convener:**

Svein Disch Mathiesen

**Marina Tonkopeeva, Svein Disch Mathiesen**  
**International Centre for Reindeer Husbandry**

Session description

The Arctic region is experiencing unprecedented environmental changes, posing significant challenges to its ecosystems and communities. The impacts of climate change in the Arctic are manifold, affecting the delicate balance of its unique ecosystems and threatening the way of life for many Indigenous peoples. Addressing these challenges requires a comprehensive approach that recognizes and integrates the vast wealth of traditional knowledge accumulated over generations by Arctic Indigenous peoples.

In this conference session, we will delve into the critical topic of climate change adaptation in the Arctic, specifically emphasizing the indispensable role of traditional knowledge of the Indigenous peoples. The session will explore the crucial role of traditional knowledge as a valuable tool for climate change adaptation in the Arctic. Through presentations and discussions, we will examine how traditional knowledge systems offer insights into the changing dynamics of the Arctic environment, including snow and ice conditions, shifts in pastures and grazing areas, land use changes, and ecosystem interactions. The session is a part of the global 10545 GEF-UNEP Reindeer Herding and Resilience project.

Unique Session ID = 525

## 2.4.2 Climate Change Adaptation in the Arctic: Adaptation Strategies for Arctic Indigenous Communities

### Convener:

James Badu

### Co-conveners:

Jacob Taarup-Esbensen  
Stig Andreas Johannessen  
Bjørn Ivar Kruke  
Gunhild Birgitte Sætren

**James Badu<sup>1</sup>, Jacob Taarup-Esbensen<sup>2</sup>, Stig Andreas Johannessen<sup>3</sup>, Bjørn Ivar Kruke<sup>4</sup>,  
Gunhild Birgitte Sætren<sup>1</sup>**

**<sup>1</sup>Nord University, <sup>2</sup>University College Copenhagen, <sup>3</sup>University Centre in Svalbard, <sup>4</sup>University of Stavanger**

### Session description

The Arctic region is experiencing the profound impacts of climate change, with rising temperatures, weather extremes, changing precipitation patterns, and ecosystem shifts. Among the most vulnerable populations in the Arctic are the indigenous communities, who have lived in harmony with their environment for millennia. However, the rapid changes brought about by the effects of climate change threaten the fabric of their traditional way of life, culture, and subsistence practices.

This conference session aims to shed light on the challenges faced by Arctic indigenous communities that are experiencing the effects of climate change and explore the adaptation strategies they employ to cope with these unprecedented changes. By presenting research findings, case studies, and firsthand experiences, the session seeks to foster a better understanding of the critical issues these communities confront and provide a platform to discuss effective adaptation measures, which takes indigenous knowledge into account.

This session aims to provide an opportunity for the researchers to share and exchange their knowledge and experience in fields relevant to climate adaptation strategies in Arctic indigenous communities. Key focus areas include, but are not limited to 1) Climate change impacts on Arctic indigenous communities; 2) Local knowledge in climate governance; 3) Community-led adaptation initiatives; 4) Collaboration and partnership for resilience; 5) Policy and governance for adaptation; 6) Building climate adaptation capacity and empowerment.

Unique Session ID = 604

### **2.4.3 Should I Stay or Should I Go Now: Community Relocation, Managed Retreat, and Migration in the North**

**Convener:**

Guangqing Chi

**Co-convener:**

Davin Holen

**Guangqing Chi<sup>1</sup>, Davin Holen<sup>2</sup>**

**<sup>1</sup>Pennsylvania State University, <sup>2</sup>University of Alaska Fairbanks**

#### Session description

Climate change is a slow-moving disaster. In the North, coastal predominately indigenous communities are experiencing climate impacts, including thawing permafrost leading to coastal land loss and disappearance of lakes, extreme storms causing land loss and coastal inundation, and declining sea ice leading to unsafe traveling and hunting conditions. One response to these challenges is to relocate the entire community, which is problematic. Complete relocation to a new location means learning about new hunting, fishing, and gathering areas distancing the community and culture from ancestral homelands. Relocation is also prohibitively expensive. Alternatively, communities may choose to slowly retreat to safer ground close by as funding becomes available. Individuals and families may also choose to migrate to urban centers because of compounding climate and social factors. But still many people choose to stay despite the challenges. Research on Northern out-migration and relocation has been minimal, even for the most threatened communities. This session calls for papers that examine the drivers and processes of relocation, managed retreat, and migration. It also calls for stories and narratives of the experiences of people in the North who are dealing with these choices.

Unique Session ID = 548

## 2.5 Building capacity and institutional resilience

### 2.5.1 The Architecture of Urban Cooperation: Fostering Local Development in a Changing Arctic

Convener:

Nadezhda Filimonova

**Nadezhda Filimonova**  
**Belfer Centre for Science and International Affairs**

#### Session description

As the effects of climate change continue to pose significant challenges in the Arctic, cities and their residents are at the frontlines of various transformative processes. Over the years, Arctic cities have developed multiple forms of cooperation to address these challenges to compensate for financial, scientific, geographical, and jurisdictional constraints. This session brings together experts and practitioners from numerous disciplines to develop knowledge on the circumstances and objectives for cities to establish cooperation, both within city networks (e.g., Arctic Mayor's Forum) and with non-governmental organizations, academic institutions, and residents, to foster the Arctic cities' sustainable and resilient future. In addition, the panel brings an understanding of resources (e.g., financial) and knowledge that local authorities require to elaborate and implement their policies and who provides those resources. By examining urban collaborative forms of governance, one can better comprehend whether and how diverse governance practices and knowledge travel and translate between cities in remote locations and severe climatic conditions. Ultimately, bringing awareness about different forms of urban cooperation contributes to discussing the future pathways for Arctic governance development under the rapid climatic and geopolitical changes.

Unique Session ID = 586

## 3.0 Sustainable economic development

### 3.0.1 Sustainable Mining in the Arctic: An Interdisciplinary Discussion

**Convener:**

Florian Vidal

**Co-convener:**

Rasmus Gjedssø Bertelsen

**Florian Vidal, Rasmus Gjedssø Bertelsen**  
**UiT The Arctic University of Norway**

Session description

In light of the ecological transition, the quest for critical raw materials (CRMs) is taking a new turn, sharply expanding to facilitate the post-carbon socio-technical transformation. In the Arctic region, increasing effort is observed regarding potential mining projects as significant deposits are identified. The potentiality to explore and exploit metals and minerals such as copper, nickel, or rare earth elements (REEs) also highlights stark challenges for operating mining activities in a fragile and near-pristine ecosystem while the climate regime is in radical and fast transformation. As growing competition to access to CRMs shapes the global industrial order, technological powers such as the United States, China, and the European Union loom to secure supplies for digital and carbon-free technologies. In this respect, Arctic countries seek to invest in viable future mining operations while supporting innovative and eco-friendly technologies.

The panel discussion aims to pinpoint critical bottlenecks that face a sustainable mining model. The main points to be addressed include the following questions: How could stakeholders work towards establishing a post-carbon mining model consistent with an integrative and holistic dimension? What could be sustainable mining into a circular economy? Could the extractive industry be part of a loop within the recycling industry? Could the Arctic region become a global reference for leading extractive operations?

From an interdisciplinary perspective, this session invites participants to discuss and tackle feasible solutions in the Arctic region for implementing long-term industrial processes consistent with required social, ethical, and environmental standards.

Unique Session ID = 673

### 3.0.2 The social dimensions of energy transition in the Arctic

**Convener:**

Tiril Vold Hansen

**Co-convener:**

Jacob Taarup

**Tiril Vold Hansen, Jacob Taarup  
Svalbard Social Science Initiative**

Session description

In this panel, the Svalbard Social Science Initiative (SSSI) invites researchers from the social sciences and humanities to share their insights on the cultural, societal, and political dimensions of energy transition in the Arctic. An energy transition from fossil fuels to renewable, low-carbon energy resources is essential to mitigate climate change, and some of the most polluting towns in the world are located in the Arctic. The success of the energy transition is, however, likely to depend not only on technological solutions but on socio-political factors that ensure free, prior, informed and inclusive processes.

The Arctic faces several challenges in this regard. The inclusion of multiple voices in the political processes of energy transition varies considerably across the Arctic states. Several communities rely heavily on the petroleum industry, and some fear that climate adaptation measures may unjustly hinder economic development. The energy transition can also threaten traditional and indigenous ways of life, and renewable energy projects may lean on green colonialism.

Attention to the meanings and understandings of energy transition processes is therefore called for. Moreover, energy transition processes take place at a local level and therefore require local innovative solutions. Contributions that study energy transition processes from below and within where the changes are taking place are therefore especially welcome. We also recognize that the political processes of the energy transition are intrinsically linked to power and emphasize the need to address this.

Unique Session ID = 506



## 3.1 Sustainable economic development in the Arctic

### 3.1.1 Building Sustainable Arctic Futures: Exploring the WEF Nexus and Socio-economic Resilience

**Convener:**

Zia Madani

**Co-conveners:**

David Natcher

Zia Madani

Andrey Mineev

**Zia Madani, PhD, JSPS Research Fellow<sup>1</sup>, David Natcher, PhD, Professor<sup>2</sup>, Andrey Mineev, PhD, Researcher<sup>3</sup>**

**<sup>1</sup>Polar Cooperation Research Centre, Kobe University, <sup>2</sup>University of Saskatchewan, <sup>3</sup>High North Center for Business, Nord University Business School**

Session description

As the Arctic takes center stage in global discussions, this session delves into the multifaceted challenges and opportunities it faces seeking to harmonize the complexities within the Water, Energy and Food (WEF) Nexus in a transboundary context, acknowledging the diverse interests and values of governments, Indigenous communities, and other resource-dependent populations, and the interplay of global common goods inherent within the WEF Nexus. In pursuit of a sustainable Arctic future, an interdisciplinary perspective becomes paramount to foster a comprehensive understanding of the interconnectedness and cross-sectoral interactions among WEF resources. We aspire to develop effective policies and regulations for resource-planning. The transboundary scale adds an extra layer of intricacy to Arctic governance. This session critically evaluates existing mechanisms, rules, and policies, seeking improved coordination among them. It grapples with challenge of balancing different values, systems, and dynamic influence of evolving science and technology in the Arctic.

We recognize that the Arctic faces environmental, societal, and economic challenges, compounded by growing geopolitical tensions. Resilience, as defined by “a capacity to navigate change by adapting and responding to external shocks in ways that maintain essential identity, function, and structures, which unfolds within environmental, social and economic dimensions” (Arctic Resilience Report, 2016), is central to navigating these changes. This session explores both traditional and forward-looking approaches to bolster the resilience of Arctic communities, regions, and socio-economic systems. It emphasizes the concept of “building back better” and acknowledges that what was resilient in the past may require re-evaluation for a sustainable and thriving Arctic future.

Unique Session ID = 655

### 3.1.2 CSR, SMEs and sustainable economic development in the Arctic

**Convener:**

Svein Tvedt Johansen

**Co-conveners:**

Gisele Arruda

Lara Jóhannsdóttir

Matti Muhos

**Svein Tvedt Johansen<sup>1</sup>, Gisele Arruda<sup>2</sup>, Lara Jóhannsdóttir<sup>3</sup>, Matti Muhos<sup>4</sup>**

**<sup>1</sup>UiT The Arctic University of Norway, <sup>2</sup>The Polar Connection, <sup>3</sup>University of Iceland, <sup>4</sup>University of Oulu**

Session description

The Arctic region possesses remarkable economic potential, while at the same time being susceptible and vulnerable to environmental and demographic changes.

To small and medium sized enterprises (SMEs) working within the region, this accentuates the importance of corporate social responsibility and social sustainability. Realizing sustainable economic development in the Arctic requires a strong focus on corporate social responsibility/corporate sustainability so as to protect sensitive and often fragile natural and social environments

In the session we welcome contributions which describe companies' commitments to the UN Sustainable Development Goals, the UN Global Compact, the Global Reporting Initiative and the new European Sustainability Reporting Standards (ESRS), but also circular and blue economy, smart specialization, knowledge-intensive entrepreneurship, and new parameters of education (Arruda & Jóhannsdóttir, 2022)

Adhering to corporate social responsibility and working towards social sustainability often means balancing often conflicting goals, values, institutional logics and stakeholders (e.g. investors versus community). By institutional logics we here mean organizing systems of values, beliefs and norms by which people, groups and organizations make sense of, and evaluate their activities (Haveman & Gualtieri, 2017).

As a result we also encourage contributors to describe possible conflicts that might appear while working towards social sustainability and how such conflicts are managed or resolved.

In the session researchers will present their papers followed by questions from the audience.

Unique Session ID = 662

### **3.1.3 Respecting Indigenous peoples' rights and enabling (Re)Distribution of non-renewable resources for inclusive green industrial development in the Arctic.**

**Convener:**

Suyash Jolly

**Co-conveners:**

Sophie Thériault

Gail Fondahl

Jarle Løvland

Åge Mariussen

**Suyash Jolly<sup>1</sup>, Sophie Thériault<sup>2</sup>, Gail Fondahl<sup>3</sup>, Jarle Løvland<sup>1</sup>, Åge Mariussen<sup>1</sup>**

**<sup>1</sup>Nordland Research Institute, <sup>2</sup>University of Ottawa, <sup>3</sup>University of Northern British Columbia**

Session description

In recent decades, the Arctic region has been the focus of growing interest from the extractive industries, mainly due to global warming, increased accessibility to resources and the development of new shipping routes. Resource extraction on Indigenous lands in the remote North may generate economic benefits for the region and local communities. However, prior research has also documented the significant negative impact on the natural flora and fauna, wildlife, and extreme social and economic disparities in the distribution of non-renewable resource wealth at the global, national, regional and local levels.

This session aims to compare and contrast how the existing legal and institutional frameworks enable and constrain a more equitable distribution of the benefits of the resource-extractive development model for indigenous communities. The session invites contributions based on qualitative and quantitative research methodologies on the following themes:

1. Explaining how different non-renewable resource legal and policy regimes and Indigenous peoples' rights framework's structure access to land and non-renewable resources;
2. Comparing and contrasting the different legal and institutional avenues in the different nations in the Arctic region for Indigenous communities to benefit from the non-renewable resources extracted from their traditional territories (e.g., royalty systems, taxation, joint ventures, employment and business opportunities, negotiated agreements);
3. New legal and institutional mechanisms that are required to enhance the capacity and increase indigenous peoples' agency in fostering a more equitable distribution of wealth from the resource extraction both between and within communities and to ensure that their rights are not marginalized

Unique Session ID = 681

### 3.1.4 A critical lens on ‘critical’ minerals: Comparative perspectives on mining and Indigenous livelihoods.

**Convener:**

Thierry Rodon

**Co-convener:**

Gertrude Saxinger

**Thierry Rodon<sup>1</sup>, Gertrude Saxinger<sup>2</sup>**

**<sup>1</sup>Université Laval, <sup>2</sup>University of Vienna & Austrian Polar Research Institute APRI**

Session description

Few studies have adopted a multi/interdisciplinary approach to grasp the legal, economic, societal and environmental (cumulative) impacts of mining in the era of “green transition”. which requires an enormous increase of mining worldwide for “critical minerals” enabling the production of carbon-free energy and digital infrastructures to tackle global warming. This session provides space for cross-regional discussions, starting out from the circumpolar North, where both aspects of green transition are at play: the lure of critical minerals and severe climate change.

Mineral exploration and extraction constitute a prototype of global industry characterized by primarily large-scale multi-national corporations operating in different countries under very different legal, social, political and spatial conditions. Under these globally diverse conditions, Circumpolar Indigenous communities try to control these extractive developments either by opposing or supporting mining activities on their lands. Whatever their stance, they tend to experience very negative environmental and social impacts while trying to capture economic benefits. We invite proposals that critically examine the cumulative social and environmental impacts of intensifying mining activities on Circumpolar Indigenous communities in the context of green transition, and the different strategies used by these communities to mitigate these impacts and to benefit from mining activities in their traditional lands.

The session is organized by the MinErAL network, which builds on a partnership between Canada, Fennoscandian countries, Australia and Melanesia, to serve as a forum for knowledge exchange between researchers and Indigenous organizations on the impacts of mining encounters on Indigenous livelihoods.

Unique Session ID = 471

### 3.1.5 Innovation and entrepreneurship in Sámi businesses

**Convener:**

Vigdis Nygaard

**Co-convener:**

Eva Jenny Jørgensen

**Vigdis Nygaard<sup>1</sup>, Eva Jenny Jørgensen<sup>2</sup>**

<sup>1</sup>NORCE, <sup>2</sup>UiT

Session description

Innovation and entrepreneurship are key drivers for strengthening value creation in indigenous companies and key mechanisms for asserting inherent rights, sovereignty, self-determination and self-governance (Anderson et al., 2006; Hindle & Lansdowne, 2005; Hindle & Moroz, 2010; Peredo et al., 2004). However, innovation and entrepreneurship in a Sámi context are still understudied topics that needs contributions from the practical as well as theoretical fields.

Existing literature on indigenous innovation and entrepreneurship was first dominated by how these concepts can be understood and distinguished from more mainstream perspectives on innovation and entrepreneurship (see for example Hindle & Moroz, 2010). Then, the need for integrating the context was brought in by Croce (2017), who developed a contextualized indigenous entrepreneurial model focusing on urban, rural, and remote contexts with different needs of tailormade programs and measures. Another recent development has been to bring the concepts of entrepreneurial and innovation ecosystems into the this literature (Mika et al., 2022). The literature on Sámi innovation and entrepreneurship is still sparse and several knowledge gaps have been pointed out regarding Sámi tourism and experiences (Ren, et al., 2020). In general, the research fields of sustainability and innovation has merged, as innovation is a vital tool for holistic sustainability of products, organizations, and local communities (Ritala, 2019; Høegh-Guldberg, et al, 2022). Sami culture face sustainability challenges at different levels, however, there are also vital potentials for sustainable value creation as well as learning inspiration for other actors.

Unique Session ID = 484

### 3.1.6 Mitigating and adapting to climate change through finance

**Convener:**

Dr. Lára Jóhannsdóttir

**Dr. Lára Jóhannsdóttir**  
**University of Iceland**

#### Session description

Addressing climate change, through mitigation and adaptation, to ensure thriving communities and ecosystems requires substantial amount of finance. This is particularly relevant in the Arctic where the warming is faster than the global average (Rantanen et al., 2022), thus requiring transformational change so that a net zero economy in the region can be realized, and adaptation financed both in the case of public and private finance to ensure longevity and well-being around the globe and in the region. Finance, in this context, is relevant for the Sustainable Development Goals and the Paris Agreement, but also EU Policy and the Arctic Investment Protocol, just to name few. Because of the increased pressure for action and transparency the new ESRs standards are of importance, but inaction carries the risk of climate change litigation, stranded assets, and disinvestment.

Within this context researchers are invited in an open session to share outcome of their studies relevant to the theme of the session. This is followed by a roundtable discussion where audience are engaged in the dialogue with a support from the session moderator.

Unique Session ID = 485

### 3.1.7 Arctic Tourism Futures

**Convener:**

Dieter Müller

**Co-convener:**

Outi Rantala

**Dieter Müller<sup>1</sup>, Outi Rantala<sup>2</sup>**

**<sup>1</sup>Umeå University, <sup>2</sup>University of Lapland**

Session description

Today tourism is an important source of income in various places in the Arctic. While the Arctic is often depicted as a northern wilderness, recent research has recognized that tourism in the region is variegated. Despite these varieties, a clear seasonality underlined by the occurrence of northern lights and midsummer sun unites the region and contributes to a perceived exoticness. Being still a part of the cryosphere, an iconic wildlife as well as specific landscape types are other ingredients of the mediated image of the Arctic region.

Today, a variety of perspectives from the social sciences, the humanities as well as from science address tourism in the Arctic from their respective angles, asking new questions and experiment with new ideas. Still, while many studies in Arctic tourism hitherto have accomplished a baseline knowledge, the rapid development in the Arctic warrants rejuvenated approaches acknowledging the rapid environmental, socio-economic and political changes in the region. In this context, traditional business perspectives are complemented by alternative theoretical approaches highlighting communities, geographical imaginaries and diverse relationalities, also featuring the application of recent theoretical reasoning within an Arctic context.

This session aims to challenge prevalent instrumental research interests and techno-rational agenda aiming for economic growth in tourism research by introducing a wider approach on Arctic tourism. These approaches acknowledge diverse new conceptualizations that seek to help addressing the future of Arctic tourism. Hence, the session seeks to bring in-depth and innovative scholarship together with creative thinking across “tourism” disciplines.

Unique Session ID = 520

### 3.1.8 Indigenizing Arctic: take space at the economic table

**Convener:**

Varvara Korkina Williams

**Co-convener:**

Victoria Sharakhmatova

**Varvara Korkina Williams<sup>1</sup>, Victoria Sharakhmatova<sup>2</sup>**

**<sup>1</sup>Institute of Arctic Studies, Dartmouth college, <sup>2</sup>ARCTICenter, University of Northern Iowa**

Session description

Discussions surrounding the integration of sustainability into economic development in the Arctic have focused on concepts such as the circular economy, social entrepreneurship, and the blue economy. However, it is important to acknowledge that Indigenous communities in the Arctic have long practiced sustainable economic models. These economies rely on a harmonious and enduring connection between humans and the natural world, with Indigenous knowledge serving as a vital link.

Arctic Indigenous enterprises, including corporations, obshinas, operate with dual mandates. They engage in business activities to generate profits while also assuming responsibility as Indigenous entities for their people, culture, language, environmental values, and aspirations. Indigenous businesses adhere to traditional principles, such as avoiding overharvesting, caring for the land, and considering the needs of future generations.

Using Arctic regions as case studies, this session will address the following questions: What policies and state design principles are most effective in meeting Indigenous economies? What 'new' Indigenous economic institutions have been created in the last years and what are their characteristics? What is the role of Indigenous knowledge and culture in the creation and development of Indigenous economies? How to preserve the unique and intangible Indigenous culture in the market context?

We invite contributions from different Arctic regions and communities, and Indigenous and early-careers scholars are especially welcome. We would like to invite presentations across all disciplines that feature successful experience, and explore different models across the northern hemisphere.

Unique Session ID = 529



### **3.1.9 Formalizing and Streamlining Socio-economic Data Platforms Across the North for Food Systems Analysis**

**Convener:**

Dr. Mike Jones

**Co-convener:**

Rachael Miller

**Dr. Mike Jones<sup>1</sup>, Rachael Miller<sup>2</sup>**

**<sup>1</sup>University of Alaska Anchorage, <sup>2</sup>Alaska Pacific University**

Session description

Arctic researchers face a challenging data environment when modeling inclusive and equitable food systems. The fixed costs of identifying quantitative data sources can be quite high, and this is significantly multiplied for research across borders. With the significant cost of establishing sustained primary data collection methods, it is prudent to determine what secondary data may be available. Data sharing across the circumpolar north will aid in assessing food stocks and flows in real time and model for potential crises, proactive planning, and optimizations.

As an example, Alaska's existing publicly-available sources include but are not limited to retail level food price data; agricultural production; wild food collection and use; nutrition and health data; relevant infrastructure for food supply chains; and environmental monitoring. Just within this single state, data collection and access channels can be a murky environment to navigate. Collaboration may yield clarity, reduce costs, and foster long-term resiliency for food system decision-makers.

Inviting the 10+ UArctic Thematic Networks that pertain to food, we propose a working, participatory session dedicated to mapping the data universes in each of our UArctic nations, particularly as they relate to socio-economics and food systems.

Tangible outputs may include:

- Establishment of key data themes
- Defined key quantitative variables or indicators within each data theme
- Outlined and linked data sources for each variable/indicator
- Generally accepted data descriptions and applications
- Draft repository of data challenges and omissions, by country and theme
- Human capacity and interest in data sharing leadership in Circumpolar nations

Unique Session ID = 633

## 3.2 Green transition and land use

### 3.2.1 Arctic Green Transitions: Contexts and Practices

**Convener:**

Lill Rastad Bjørst

**Co-convener:**

Peder Roberts

**Lill Rastad Bjørst<sup>1</sup>, Peder Roberts<sup>2</sup>**

**<sup>1</sup>Aalborg University, <sup>2</sup>University of Stavanger**

Session description

Green transitions are currently underway or in discussion for many parts of the world — including in the Arctic. This open session explores the phenomenon of the green transition in historical and contemporary context. The global green transition involves resources that may be found in the Arctic— but without necessarily recognizing Arctic residents and communities in the solutions envisioned. Communities across the Arctic have long experience with transitions that have changed both lifeways and environments, often in the context of unequal power relations that have imposed rather than co-produced changes. We hope to bring perspectives from past transitions in Arctic regions and local energy stories into discussion with current discussions of green transition with a particular focus on these as socio-political as much as technical phenomena. Debates over wind power, hydro power, oil extraction, Power-to-X installations, carbon capture and storage and mining of rare earth elements all raise questions of the agency of local Arctic residents in the context of global pressures for particular transitions. Consequently we seek contributions from historians, planners, political scientists, anthropologists, and all others whose work bears upon how Arctic communities can navigate the green transition.

Unique Session ID = 597

## 3.3 Blue economy

### 3.3.1 Governance of offshore renewable energy initiatives in the Arctic

**Convener:**

Maaïke Knol-Kauffman

**Maaïke Knol-Kauffman**  
**UiT The Arctic University of Norway**

Session description

In the Arctic, there is a large potential to speed up sustainability transitions through offshore renewable energy production, such as through offshore wind, wave and tidal energy, as well as through other decarbonization efforts like hydrogen and ammonia production. Despite their importance to reach global climate goals, the development of these activities can be hampered by institutional barriers or through conflict with other users of coasts and marine spaces. Hence, there is an urgent need to explore sustainable pathways to offshore energy production and to draw lessons relevant to the Arctic states. For this session, we invite contributions about these emerging activities, focusing on one or several of the following related themes: (1) the development of governance arrangements, including licensing systems, (2) the mobilization of local and regional actors, spin-off effects and conflict mitigation; (3) current and potential roles of digital tools supporting governance performance; and (4) the potentials and challenges with ocean multi-use concepts and marine industrial parks.

Unique Session ID = 573

## 3.5 Local food systems and indigenous knowledge

### 3.5.1 Food security and emergency preparedness in the Arctic

**Convener:**

Hilde Halland

**Co-conveners:**

Carlo Aall

Frøydis Gillund

Bjørn Vidar Vangelsten

Marianne Vileid Uleberg

**Hilde Halland<sup>1</sup>, Carlo Aall<sup>2</sup>, Frøydis Gillund<sup>1</sup>, Bjørn Vidar Vangelsten<sup>3</sup>, Marianne Vileid Uleberg<sup>1</sup>**  
**<sup>1</sup>NIBIO, <sup>2</sup>Western Norway Research Institute, <sup>3</sup>Nordland Research Institute**

Session description

The importance of strengthening national and regional food security is actualized by both the dramatically changed geopolitical situation and climate change. Researchers and policy makers call for measures. For instance, a recent report to the Norwegian Environmental Protection Agency on the combined effect of local climate risks, transboundary climate risk, and global security risks concluded that such a combination of risks may require rationing of food, also for the case of Norway. Partly based on this study, the Norwegian Total Preparedness Commission proposes that Norway immediately make plans to increase national self-sufficiency based on Norwegian raw materials.

Food production based on national and even local resources is an important preparedness measure, to reduce dependencies on imports, as well as to maintain agricultural land, local knowledge, rural settlements, and infrastructure. This is particularly important in northern areas, as long distances make the region more vulnerable to disruptions in supply chains.

There are considerable opportunities for increased food production in the north. Still, structural changes the last decades have led to a drastic reduction of farmers. This, in addition to challenges such as lack of necessary infrastructure and service providers, fragmented supply chains, limited access to workforce, may threaten the basis for sustainable food production, and affect potentials for building sustainable local communities.

In this session we want to focus on climate robust solutions to overcome important bottlenecks for enhanced sustainable food production and supply in the north, to strengthen food security and emergency preparedness in the region.

Unique Session ID = 656

### **3.5.2 Arctic Indigenous Food Knowledge Systems: Intergenerational Transfer between Elders and Youth**

**Convener:**

Jessica Penney

**Co-conveners:**

Anders Oskal

Svein Mathiesen

Nancy Wachowich

**Jessica Penney<sup>1</sup>, Anders Oskal<sup>2</sup>, Svein Mathiesen<sup>2</sup>, Nancy Wachowich<sup>3</sup>**

**<sup>1</sup>University of Toronto, <sup>2</sup>International Centre for Reindeer Husbandry, <sup>3</sup>University of Aberdeen**

#### Session description

The Arctic region is home to diverse Indigenous communities with rich traditions and a deep connection to local environments. These communities possess a wealth of Indigenous knowledge and environmentally responsible practices, which are increasingly recognized as valuable assets in pursuing food sovereignty in the Arctic. Food sovereignty is understood as the right to healthy, nutritious, and culturally appropriate food, and to associated knowledge, language and cultural practices. Yet, colonial impacts on food and industrial and geopolitical challenges to Arctic Indigenous lands, waterways and food systems have made the path towards achieving food sovereignty increasingly difficult to map. However, Indigenous knowledge systems, rooted in the wisdom accumulated over generations, offer valuable insights into sustainable resource management, land stewardship, and conservation practices which shape food access.

This session will bring together interdisciplinary collaborators, including Arctic Indigenous food knowledge holders, researchers, and community leaders, to discuss and explore recent understanding of Indigenous food knowledge systems in shaping a sustainable, healthy future for the Arctic. In particular, the session will focus on the efforts of the Inuksiutit: Inuit Food Sovereignty in Nunavut project and recent findings by Saami researchers on Indigenous knowledge and insight of food and the importance of the NOMAD Indigenous FoodLab to promote Arctic Indigenous food systems through intergenerational knowledge sharing between Elders and youth. This session is part of the Arctic Council EALLU project on Indigenous youth, Arctic change and food systems, and the GEF/UNEP Reindeer herders resilience project.

Unique Session ID = 680

### 3.5.3 Local Foraging and Self-Reliance in the Arctic

**Convener:**

David Anderson

**Co-convener:**

David Anderson

**David Anderson, David Anderson  
University of Aberdeen**

Session description

This session focusses on the cultural histories of wild food procurement in industrialised or severely disrupted frontiers of the North Atlantic. Focusing on the work of indigenous experts and local enthusiasts, we will discuss how local foraging plays into a renewed ideology of self-reliance which came about after the failure of commodity chains during the global pandemic. The ideology of the resilient “self” contributes to an enriched discussion of the notion of sovereignty as simply a notion of control and possession. The session aims to combine insights from both indigenous and settler communities who often share intersecting and/or competing interests in subsistence. The session will also explore the gendered nature of foraging.

Submissions might include accounts of “illegal” fishing, the gathering of berries and plants along roads, or forgotten or repressed strategies such as Scottish Traveller Gypsy pearl or pinenut harvesting, moose or pant harvesting by local residents in Northern Scandinavia, as well as analyses of the cosmopolitics of campasino subsistence at the frontiers of extraction.

Participants may consider:

- the politicised description of foraging as ‘poaching’, ‘subsistence’, or ‘non-timber forest products’
- cosmologies of invitation and sharing implicit in foraging strategies
- discussions of gender diversity and gender chauvinism in describing foraging
- worries and accommodations to concerns of pollution
- the way in which roads and infrastructure both provide access and fragment foraging landscapes
- a broader consideration of sovereignty conceived as entitled action rather than possessive individualism.

We welcome submissions of indigenous experts, ethnobotanists, ethnographers, historians and philosophers of science, foresters, and sociologists.

Unique Session ID = 453

### 3.5.4 Niriqatiginnga: Fostering Food Security and Innovation for Northern Supply Chains

**Convener:**

James Bell

**Co-conveners:**

Tara Tootoo Fotheringham  
Kami Norland

**James Bell<sup>1</sup>, Tara Tootoo Fotheringham<sup>2</sup>, Kami Norland<sup>3</sup>**

**<sup>1</sup>Arctic Buying Company, <sup>2</sup>Arctic Buying Company Kivalliq, <sup>3</sup>Minneapolis College of Art and Design**

Session description

**Abstract:** Food security is a pressing issue in northern communities, where factors such as remoteness, limited access to fresh and affordable food, and the impacts of climate change pose significant challenges. Niriqatiginnga is an innovative, experimental and pilot framework that aims to address food insecurity and to promote sustainable food systems in Arctic regions. Our program focuses primarily on northern Manitoba and Kivalliq Nunavut, with our project based in Winnipeg, Manitoba. This abstract presents an overview of the Niriqatiginnga framework, its objectives, and the strategies employed to foster food security, resilience, and innovation.

As a social program and an Inuit-designed technology platform, our pilot Niriqatiginnga framework operates at the intersection of technology, community engagement, and traditional knowledge exchange. It leverages data-driven research, collaboration with local communities, and partnerships with southern farmers, entrepreneurs, and food producers to tackle the complex issue of food insecurity. The framework emphasizes capacity building, education, and awareness to empower communities and enhance their self-sufficiency in food production and distribution.

Join us for a dynamic and interactive session that delves into the pressing issues of northern food insecurity, capacity building and skills development, and sustainable, environmentally-responsible northern supply chain optimization. Through a combination workshop and an engaging roundtable dialogue, we will explore innovative solutions and dialogues to address these challenges and empower our northern communities. Participants will be able to learn about Niriqatiginnga, which focuses on fostering resilience and innovation in northern food systems through collaborative discussions and interactive installations.

For more information on Niriqatiginnga please visit the project web site at <https://niriqatiginnga.ca>

Contact the session conveners via [niriqatiginnga@gmail.com](mailto:niriqatiginnga@gmail.com)

Unique Session ID = 429

## 4.0 People of the North

### 4.0.1 Advancing Indigenous Participation in Arctic Labor Markets: Challenges, Opportunities, and Innovations

**Convener:**

Gabrielle Slowey

**Co-convener:**

Magalie Quintal-Marineau

**Gabrielle Slowey<sup>1</sup>, Magalie Quintal-Marineau<sup>2</sup>**

<sup>1</sup>York University, <sup>2</sup>Institut national de la recherche scientifique

Session description

In the 21st century, active participation in the labor market and enhancing Indigenous employability have risen as central concerns for enhancing the quality of life for individuals and their communities in numerous Arctic regions. However, a significant shortage of skilled tradespeople and labor exists across various Arctic regions. Addressing this need, numerous state governments have prioritized meeting labor demands and have launched new programs focused on training and employing local and Indigenous populations. Concurrently, diverse labor, community, and business initiatives have taken critical steps to bridge the diversity gap and provide skills training and employment opportunities. The central focus of this session is to explore the challenges and opportunities tied to increasing the participation of Indigenous peoples in the labor market. This session aims to thoroughly explore the dynamics of employment within northern labor markets.

Presentations are encouraged to cover an array of topics related to the northern labor market, encompassing the everyday experiences of Indigenous employees in their workplaces, gendered economic participation, employment dynamics and trends in various sectors, the transient workforce, and the historical colonial encounters.

Unique Session ID = 646



## 4.0.2 Speak Indigenous: Remembering, Resurgence and Renewal Through Language

**Convener:**

Ramona Neckoway

**Co-conveners:**

Barbara Filion

Tanya Dawn McDougall

Nelliane Cromarty

**Ramona Neckoway<sup>1</sup>, Barbara Filion<sup>2</sup>, Tanya Dawn McDougall<sup>3</sup>, Nelliane Cromarty<sup>3</sup>**

**<sup>1</sup>University College of the North, <sup>2</sup>Canadian Commission for UNESCO, <sup>3</sup>St. Theresa Point First Nation**

Session description

Indigenous languages are vital to Indigenous communities as they represent, among other things, critical conduits between past and future. For many Indigenous peoples, culture and identity are intrinsically tied to language, land and territory. This session is led by Indigenous language advocates from Canada who offer interdisciplinary and intersectional views concerning the urgency and work of language revitalization. They will explore and share an Indigenous led language revitalization initiative born in the boreal regions of northern Canada. Panelists will reflect on UNESCO's Decade of Indigenous Languages and situate this effort within the context of "Speak Indigenous," an initiative centered on Indigenous language revitalization.

In advancing message centered on the importance of creating visibility of Indigenous languages, panelists will also consider the necessity of creating safe spaces for Indigenous languages and share best practices and localized language revitalization tools. Creating such spaces renders Indigenous languages visible thus affirming the value of Indigenous peoples and their languages. This session will include critical insights and reflections of interdisciplinary and intersectional importance of the Indigenous languages in the north, in Arctic regions, and beyond.

Unique Session ID = 663

#### 4.0.4 Promoting healthy and inclusive ageing in Arctic people and communities

**Convener:**

Anastasia Emelyanova

**Co-convener:**

Jordan Lewis

**Anastasia Emelyanova<sup>1</sup>, Jordan Lewis<sup>2</sup>**

**<sup>1</sup>University of Oulu, <sup>2</sup>University of Minnesota Medical School**

Session description

Description: The Arctic is undergoing rapid demographic and sociocultural changes, resulting in larger proportions of people reaching old age and a need to develop innovative ways to age well. Culturally distinct Arctic communities have developed innovative strategies to age well within their environments, including arts-based programming, intergenerational activities with older people and youth, preservation of Arctic cultures through hunting and gathering practices, and other practices supported by NGOs, governments, municipalities, and local communities. The challenges related to healthy and inclusive ageing in sparsely populated areas versus urban areas of the Arctic vary. This session will offer presentations by experts from across the Arctic to highlight the unique strengths, conditions, experiences, and practices of healthy, active, older adults. The experiences of collaboration between various stakeholders on this topic will be also presented. Abstracts are welcome from any Arctic territory.

Unique Session ID = 421

#### **4.0.5 Youth in the Arctic: Challenges and possibilities: Relationships and processes of participation and belonging**

**Convener:**

Asgeir Solstad

**Co-convener:**

Lars Uggerhøj

**Asgeir Solstad<sup>1</sup>, Lars Uggerhøj<sup>2</sup>**

**<sup>1</sup>Nord university, Fac. soc. sci./Uarctic: Thematic Network, Social Work, <sup>2</sup>Aalborg university, Dep. of sociology and social work**

##### Session description

One of the four priority topics for the Norwegian chairship of the Arctic Council has the name “People”. As a part of this topic, The Norwegian government states that “Arctic youth and Arctic Indigenous peoples will be cross-cutting priorities of the Norwegian chairship” (Government, 2023). Youth in the Arctic face different challenges, as the societies are developing rapidly, due to f.ex. urbanization, changing livelihood, consequences of climate change and general insecurity of the future. Research from recent years show that youth in the Arctic struggles with belonging and participation, and has experiences of being outside, and not coping (Frøyland, et al, 2022; Bakken, 2022; Wulf, Follesø & Olsen, 2021; Hyggen, Kolouh-Söderlund, Olsen & Tägtström, 2018; Follesø, Halås & Anvik, 2016).

In this session we focus on research on relationships, participation and belonging as central processes for youth in the Arctic, both in mental health work and in work with inclusion, more generally. Being recognized as an active member of society, who is important to others, is a value and a source of quality for life both for the individual young person, and for youth in the Arctic. The session should also include research and experiences on participation and mobilization of youth by emancipatory and empowering projects that enable youth both to develop their own lives and to play greater parts in developing society. We also look for research that looks at how responsive authorities and NGO’s are towards youth in the Arctic.

Unique Session ID = 478

#### **4.0.6 Building Active and Inclusive Participation of Arctic Youth and Communities through Community and Citizen Science**

**Convener:**

Janet Warburton

**Co-conveners:**

Roben Itchoak  
Katie Spellman

**Janet Warburton<sup>1</sup>, Roben Itchoak<sup>2</sup>, Katie Spellman<sup>3</sup>**

**<sup>1</sup>Arctic Research Consortium of the United States, <sup>2</sup>Shishmaref School, <sup>3</sup>University of Alaska Fairbanks**

Session description

This session will explore the role of youth and communities in Arctic-focused research with a particular focus on how to equitably include and support them through community and citizen science research projects in the Arctic. With the Arctic facing unprecedented changes due to climate change and other human activities, community, and citizen science offer an opportunity for Arctic communities to actively participate in and lead research, to better understand the scope of changes happening in their environment, and to develop solutions based on Indigenous Knowledge and local expertise. Youth involvement is a crucial aspect of community and citizen science as a means to care for and protect their community, protect their environment, and nurture their leadership skills.

The session will feature presenters from a variety of perspectives who have implemented community and citizen science projects throughout the Arctic with a specific focus on including youth and communities. Presentations will cover the benefits of community and citizen science, challenges and opportunities, and best practices for equitable inclusion of youth and communities. Throughout the session, participants will learn about the power of community and citizen science in sharing knowledge, addressing locally relevant issues, fostering community leadership in research and data sovereignty, and contributing to scientific knowledge and policy.

Unique Session ID = 541

#### **4.0.7 Honoring and preserving culture through indigenous cultural generative acts to reduce generative mismatch and improve health of all generations**

**Convener:**

Jordan Lewis

**Jordan Lewis**  
**Memory Keepers Medical Discovery Team**

##### Session description

The gerontological literature predominantly focuses on aging-related losses and less on the gifts we acquire as we age. Alaska Native Elders have experienced a lifetime of adversity, which persists today, but they have also remained resilient. One characteristic of successful aging among Alaska Native Elders is their commitment and passion for sharing their teachings with the youth. Generativity is concerned with using personal resources to improve the quality of life for future generations. While not commonly used in gerontological social work research, it is a cultural practice among Indigenous Elders. This decade long study has been exploring the concept of successful aging from an Alaska Native perspective, or what it means to age in a good way in Alaska Native communities. Qualitative, in-depth, interviews have been conducted with 154 Elders representing 20 participating communities across the State of Alaska to explore the concept of successful aging and the role of generativity in the aging process. For this presentation, 108 interviews with Alaska Native Elders explored successful aging. This presentation will highlight the critical role generativity plays in Alaska Native Elders' ability age in a good way, how generativity can be adapted to bridge the generative mismatch happening between generations and support each generation to healthy and meaningful lives. This presentation will also explore innovative and culturally responsive ways to teach the youth about aging in a good way and how families and communities can support their Elders to be meaningfully engaged in the rapidly changing families in the Arctic.

Unique Session ID = 408

#### **4.0.8 Social and economic inequalities in the Arctic**

**Convener:**

G rard Duhaime

**Co-convener:**

Karen Everett

**G rard Duhaime, Karen Everett**  
**Universit  Laval**

Session description

Social, cultural, and economic inequalities mark the circumpolar Arctic at various levels between and within countries and regions. For instance, income inequality has increased in most countries since the 1980s. As well, inequalities in the distribution of national income have grown as the share of capital has increased at the expense of wages. Variations in the severity and growth of inequalities from one region or one country to the next reflect many exogenous factors, e.g., liberalization of trade or technological changes, as well as endogenous factors, e.g., fiscal policies; both of which are associated with class-related factors such as wealth, income, education or occupation, and to inherited, acquired, imposed or chosen factors such as sex, gender, ethnicity, or place of residence.

This session proposes to gather contributions that describe and explain the diversity of social, cultural, and economic inequalities in the Arctic and circumpolar North, and the processes that generate them and their consequences, especially on the living conditions of the most disadvantaged groups. It also proposes to examine the intersections between the factors involved, and to draw theoretical and practical consequences.

The session brings together contributions focused on these issues and will cover multiple regions across the circumpolar Arctic. It is proposed by the WAGE Circumpolar Partnership (WAGE: Wealth of the Arctic Group of Experts), and some of the presentations will be made by its members. The session will be of interest to scholars, northerners, advocates for social justice, and policy makers alike.

Unique Session ID = 413

#### 4.0.9 Examining the societal dynamics of resilience in the Arctic

**Convener:**

Marjo Lindroth

**Co-convener:**

Heidi Sinevaara-Niskanen

**Marjo Lindroth<sup>1</sup>, Heidi Sinevaara-Niskanen<sup>2</sup>**

**<sup>1</sup>University of Lapland, Arctic Centre, <sup>2</sup>University of Lapland, Gender Studies**

Session description

The world today has set itself the goal of improved adaptation, preparedness and alertness in the face of global change. Rapid and drastic global changes have prompted the political and social scientific use of 'resilience'. Politics is rife with demands for it – on the part of states, societies, groups and individuals. Resilience is narrated as an answer to questions of security, well-being and adaptation, in particular to climate change. The coronavirus crisis only intensified the calls to increase human resilience. Non-human systems, especially the environment, are also increasingly understood as requiring resilience as much as human beings and human institutions do. Resilience has even been envisioned as facilitating change and empowerment for those struggling to cope with the consequences of the contemporary economic, social and environmental changes. In sum, the idea of resilience has been presented as a force that balances and compensates the negative impacts of unpredictability.

The question of resilience has figured centrally in Arctic scholarship, especially in natural sciences. The theme has, however, remained understudied in social scientific research. This session invites social scientific investigations that probe the societal implications and dynamics of resilience. The session welcomes theoretically and empirically oriented presentations that examine the role of resilience at local, national or international levels. In particular, the session asks, what does resilience, in effect, do in and to society? Does resilience bear particular Arctic characteristics?

Unique Session ID = 418

#### **4.0.10 Arctic settlements and cities into the 21st century**

**Convener:**

Lawrence Hamilton

**Lawrence Hamilton**  
**University of New Hampshire**

##### Session description

Arctic settlements and cities experienced dramatic changes in population, livelihoods and character over the course of the 20th century. Some late 20th-century trends have continued through the first decades of the 21st century, while others reversed or changed direction. What can we say about the various ways -- social, cultural, political, economic or environmental -- that Arctic communities in different regions are changing today? What do recent changes suggest about the decades ahead?

Unique Session ID = 424



#### 4.0.11 Urban Inuit health, wellbeing and creation of institutions

**Convener:**

Richard Budgell

**Co-convener:**

Carolyn Stone

**Richard Budgell<sup>1</sup>, Carolyn Stone<sup>2</sup>**

**<sup>1</sup>Department of Family Medicine, McGill University, <sup>2</sup>Qavvivik Inuit Family and Community Health Centre**

##### Session description

A growing number of Inuit in Canada are moving to southern and urban locations in hopes of enhancing their living conditions and their general sense of wellbeing and safety. Over 27 percent of the Inuit population in Canada now resides outside the territories of Inuit Nunangat. Despite the growing importance of this phenomenon, there is little attention dedicated to the ways that Inuit organize collectively in southern cities to foster positive relationships with others and enhance their mental and physical wellbeing.

Many Inuit organizations and institutions have been created or are in the process of being built in the South to support urban Inuit. Our session will explore different means to support the development and the orientation of health and wellbeing services for urban Inuit from 1) establishing a conceptually adequate understanding of southern Inuit perspectives on health and wellbeing, to 2) providing a proper needs assessment through research, and 3) fostering community capacity and empowerment.

We will discuss a Québec (Canada) case study by focussing on 1) the IQI model of Inuit health (Ilusirsusiarniq/bodily health, Qanuinnngisiarniq/well-being, and Inuuqatigiitsianiq/social health), 2) the Qanuikkat Siqinirmiut? (How are those in the South?) health survey, and 3) the development of the Montreal-based Qavvivik Inuit Family and Community Health Centre.

Other conveners could contribute to the discussion by sharing their experience and perspectives of urban Inuit health and well-being, from a conceptual and a needs assessment points of view, as well as their years of operation as urban Inuit institutions.

Unique Session ID = 447

#### **4.0.12 Connecting the unconnected in the Arctic**

**Convener:**

Jaap van de Beek

**Co-convener:**

Harri Saarnisaari

**Jaap van de Beek<sup>1</sup>, Harri Saarnisaari<sup>2</sup>**

**<sup>1</sup>Luleå University of Technology, <sup>2</sup>University of Oulu**

Session description

Arctic areas typically suffer from poor Internet connectivity. Yet, such connectivity is vital for modern societies. Previous generations mobile access technologies like 3G,4G and currently 5G have not satisfactorily addressed the problems of the unconnected. As a result of low population densities, long distances, lacking infrastructure etc. the operators' willingness to invest in the arctic regions is low. The next generation, 6G, is still in the “what-will-it-be” stage and risks are that previous mistakes will be made again. While the important topic of digital inclusion is mentioned and discussed in main 6G discussions today, a fortified pushing from communities is still needed to make it a reality.

This session aims to gather connectivity use cases in rural and remote arctic areas. The session welcomes proposals that include end user needs, use cases and concerns related to connectivity, as well as connectivity technology ideas.

Upon an introduction by the conveners, we plan for an open, 90min session, with 5-7 short, oral presentations from relevant stakeholders followed by a 15 min discussion moderator-led. The organizers have an extended network of potential speakers, and while the session is open for all, we will encourage targeted speakers to submit, notably including youth and indigenous people. In particular we maintain good contacts with speakers representing Sapmi villages in the North of Sweden where we have done connectivity installations, virtual reindeer slaughterhouse in North Finland, along with broad expertise in the ongoing 6G status.

Unique Session ID = 477

#### **4.0.13 Greenland imagining independence: Postcolonial politics of comparison**

**Convener:**

Ulrik Gad

**Co-convener:**

Lill Bjørst

**Ulrik Gad<sup>1</sup>, Lill Bjørst<sup>2</sup>**

**<sup>1</sup>Danish Institute of International Studies, <sup>2</sup>Aalborg University**

##### Session description

The panel reports findings and preliminary conclusions of a collective research project reading Greenlandic politics as imagining ways towards independence. In these imaginations, comparisons play central roles. Greenlandic debates and development plans are shaped by extreme clashes of scales and, hence, extreme versions of all the dilemmas invoked by an ambition to move beyond coloniality. Since Greenland does not come with one pre-packed set of peer polities obvious to compare with, a wide variety of states, peoples, territories, and polities appear in Greenlandic political discourse as models to emulate or scarecrows to avoid. Notably, these comparisons - positive and negative - play very different roles for promoters of different identity narratives (e.g., some present Canadian Inuit as models when it comes to indigenous culture - others distance themselves from this identification). Moreover, the politics of comparison plays out very differently across sectors (e.g., in language policy, multicultural and monolingual models clash openly, while in infrastructure, European models come buried in technical standards). So even if the politics of comparison has been studied in the ages of empire (Stoler) and nationalism (Anderson), the project demonstrates that agency and imagination in the postcolonial era are so different, that a study of postcolonial politics of comparison needs a different focus. Offering a new theoretical account; conducting in-depth empirical analyses of the extreme Greenlandic case; and developing a coherent methodological approach, the project reported in the panel opens up a new research agenda on the politics of comparison in processes of decolonization.

Unique Session ID = 481

#### 4.0.14 Engaging the Ecosystems of Northern Housing

**Convener:**

Julia Christensen

**Co-convener:**

Christina Goldhar

**Julia Christensen, Christina Goldhar  
Queens University**

Session description

Recent research in the area of northern and Arctic housing has emphasized connections between housing, home and health. Meanwhile, northern, Indigenous communities have long advocated for self-determination with respect to housing in order to ensure that housing meets community cultural and contextual needs and priorities, and as a means of challenging colonial modalities of northern governance. In spite of these broad discussions, northern housing policy and governance approaches continue to evaluate housing needs through narrow, reductionist methods that quantify the number of housing units to be constructed in a given community. By evoking the concept of an “ecosystem” (“eco” stemming from the Greek work oikos, or house) we hope to reconnect “housing” with the interconnected and dynamic system within which housing is centered- bridging the notions of “housing” and “home”. In this session, we invite papers that examine the ecosystems of northern housing and move beyond conceptualizing housing as infrastructure alone. Papers may expand on the diverse relationships between housing and social determinants of health, individual, family and community wellbeing, Indigenous self-determination and self-governance, cultural strength and identities, economic development, and climate and landscape characteristics, among other areas. In particular, we welcome papers that result from collaborative and/or partnership-driven research approaches with northern communities, and that advance efforts to promote the sustainability of programs, policies and innovative governance. This session will draw together a multitude of perspectives, providing a venue for interdisciplinary discussion regarding the many relationships engaged through northern housing.

Unique Session ID = 488

#### **4.0.15 Embracing Diversity: The Future of Immigrant Communities in the Arctic**

**Convener:**

Syed Musa Kajim Nuri

**Co-convener:**

Nafisa Yeasmin

**Syed Musa Kajim Nuri, Nafisa Yeasmin**  
**University of Lapland**

Session description

The Arctic region, characterized by its pristine beauty and unique challenges, has been a focal point for environmental discussions for decades. However, the human aspect is often overlooked amidst the climate change discourse. As the world witnesses unprecedented population movements, immigrants have begun to venture into the Arctic, seeking opportunities, refuge, and a better life. This session proposal aims to shed light on the future of immigrant communities in the Arctic, exploring the impact of their presence, the challenges they face, and the potential for inclusive development. However, this will be an open session. The "Future of Immigrant Communities in the Arctic" session seeks to foster a comprehensive dialogue on immigrants' evolving role and significance in this environmentally sensitive region. As climate change accelerates, the Arctic's economic and geopolitical importance grows, leading to an increased influx of individuals from diverse backgrounds. This session will bring together policymakers, researchers, community leaders, and experts to discuss and address the following themes:

1. Understanding Arctic Migration
2. Socioeconomic Integration of Youth, Women, and Adult
3. Sustainability and Arctic Identity
4. Legal and Humanitarian Perspectives
5. Partnerships for the Future

The "Future of Immigrant Communities in the Arctic" session aims to foster constructive dialogue and propose actionable solutions to ensure immigrants' integration into the Arctic is sustainable, culturally enriching, and respects the region's delicate ecological balance. Through knowledge sharing and collaboration, we hope to create a roadmap for a future where diversity and unity thrive in this unique corner of the world.

Unique Session ID = 616

#### 4.0.16 The Future for Northern and Arctic Islands - 2050 and Beyond

**Convener:**

Andrew Jennings

**Co-convener:**

Laurie Brinklow

**Andrew Jennings<sup>1</sup>, Laurie Brinklow<sup>2</sup>**

**<sup>1</sup>Institute for Northern Studies, <sup>2</sup>Institute for Island Studies UPEI**

Session description

This open panel session will explore how we can ensure, in this time of climate change and geo-political instability, that vibrant, successful Northern and Arctic Island populations can be maintained into the future. It will take a multidisciplinary approach, looking at examples from the past and present, and it will explore the roles of island governance, and indigenous culture and languages in supporting island communities. It will address questions such as, what do we mean by sustainability in an island context? How do we build resilience? What is the optimum level of development for islands? What is the role for the creative industries in creating a sense of place and wellbeing? How do we promote island connectivity, so that island communities can learn from each, develop island focussed networks and thrive in future?

Unique Session ID = 445

#### **4.0.17 TN on Geopolitics and Security Session I: Indigenous resilience, resurgence and sovereignty.**

**Convener:**

Heather Nicol

**Co-convener:**

Lassi Heininen

**Heather Nicol<sup>1</sup>, Lassi Heininen<sup>2</sup>**

**<sup>1</sup>Trent University, <sup>2</sup>University of Lapland**

##### Session description

This session explores the role of education, culture, and language in building resilience and resurgence among Indigenous Peoples in the circumpolar region. It examines the way in which the strengthening of Indigenous-centered knowledge contributes to resurgence and self-determination, and in turn challenges existing state-centered models of education, governance, and territorial regulation and control. The session is particularly concerned with cross-border cultures and histories that challenge the spatial authority of state-centered governmental functions and regulations, and the potential for the emergence of new forms of transnational or sub-national agency and identity. Questions that could be considered include: How do Indigenous-led institutional and educational projects contribute to understandings of Indigeneity and identity that are different from state-centered/national ones? What has been the legacy of state-centered models? What are the implications for conceptions of sovereignty and borders of Arctic states - are there clear examples of the way in which culture, language and Indigenous knowledge support Indigenous resurgence and self-determination, as well as cross-border cultures and transnationalisms? How do narratives of identity, as promoted through Indigenous-centered education, language, and culture challenge colonial models of representation? What boundary work do they do?

Unique Session ID = 536

#### **4.0.18 Canada's legislation to implement UNDRIP: an anchor for greater food security in Indigenous communities?**

**Convener:**

Geneviève Parent

**Co-conveners:**

Sophie Thériault

Laura Wilmot

**Geneviève Parent<sup>1</sup>, Sophie Thériault<sup>2</sup>, Laura Wilmot<sup>3</sup>**

**<sup>1</sup>Laval University, <sup>2</sup>University of Ottawa, <sup>3</sup>University Laval**

##### Session description

Our project is part of the The Wealth of the Arctic Group of Experts Partnership and focuses on economic and social inequalities in the Arctic and circumpolar North. Our specific research project proposes to carry out a critical and forward-looking analysis of the Canadian United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP Act) adopted on 21 June 2021, with regard to the concept of sustainable food security. It raises the question of whether this implementation legislation, by making the universal minimum standards for the recognition and protection of the rights of indigenous peoples enforceable in Canada, provides additional levers for Inuit communities to combat food insecurity, environmental degradation and climate change through sustainable and equitable food systems.

In northern Canada, around 76% of Inuit face problems of food insecurity. Different of factors contribute to this food insecurity: remoteness and isolation of communities, poverty, the cost of living, socio-economic inequalities, environmental degradation and climate change, which affect food systems, including traditional foods.

Our panel would present the evolution of our project. We have reflected on the importance of accountable, participatory, representative and inclusive governance of Inuit realities and knowledge in food systems to ensure equitable access to healthy, sustainable and culturally appropriate food; to protect livelihoods and the lands and resources on which they are based; to combat inequality and discrimination; to build resilience to the effects of environmental degradation; to support the transition to sustainable food systems; and to ensure health and well-being.

Unique Session ID = 582



#### **4.0.19 Ensuring mental safety of the Arctic Youth in the "non-Arctic World"**

**Convener:**

Danielle Wendehorst

**Co-convener:**

Pavel Tkach

**Danielle Wendehorst, Pavel Tkach**  
**Arctic Youth Network**

Session description

For a long time, Indigenous and non-Indigenous youth living in the Arctic faced social, economic, and political challenges. The predominance of higher education institutions in the southern parts of Arctic states forced many young people to leave their Arctic homes or acts as a barrier to pursuing further education/post secondary opportunities. More affordable living in the Southern parts of the Arctic states than in their Northern parts was and is nowadays another motive for Arctic youth to consider emigration. Furthermore, the negative effects of climate change increase the likelihood of forced climate migration.

And what challenges do Arctic youth who have emigrated from their Arctic homes confront in non-Arctic society? Political and administrative discrimination, judgment for speaking native languages, and, most seriously, gender-based violence and direct and indirect violence to Indigenous people. All of these issues have a negative impact on the mental safety of Arctic youth in non-Arctic societies.

The proposed session's goal is to pay close attention to factors influencing the mental safety of Arctic Youth who emigrated to non-Arctic regions, their positive and negative experiences interacting with local communities, and to examine why the migration itself, prompted by the Arctic's disadvantaged political, social, and economic situation, which is frequently ignored by national authorities sitting in the country's southern parts, is a traumatizing factor for the Arctic Youth.

Unique Session ID = 540

#### **4.0.20 Discussions on Teacher Education in Remote, Rural and Restricted Bandwidth Communities**

**Convener:**

Kathy Snow

**Co-conveners:**

Liz Curtis

Ylva Jannok Nutti

Niclas Ekberg

Eva Alerby

**Kathy Snow<sup>1</sup>, Liz Curtis<sup>2</sup>, Ylva Jannok Nutti<sup>3</sup>, Niclas Ekberg<sup>4</sup>, Eva Alerby<sup>4</sup>**

**<sup>1</sup>University of Prince Edward Island, <sup>2</sup>University of Aberdeen, <sup>3</sup>Sámi University of Applied Sciences, <sup>4</sup>Luleå University of Technology**

Session description

The conceptual understandings conjured in discussions of “Arctic pedagogy” usually involve traditional land-based learning, Elder partnerships, and culturally driven teaching which by their very nature demand in-person, on the land learning. Additionally, teacher education has also been driven by in-person experiential education. However, increasing digitization, and digital infrastructure has given rise to new approaches that can increase accessibility of teacher education to communities across the circumpolar world. While the use of the internet and associated digital tools can be harnessed positively, critical questions need to be asked of Arctic education and pedagogy, in relation to digitization and educational technology practices in teacher education and educator training. Questions, such as: what possibilities exist for teacher education when viewed from Arctic pedagogical perspectives? and what are the risks associated with re-colonizing through a new media? The aim of this round-table therefore is to create a space for discussion regarding the state of knowledge associated with transformative teacher education practice in the Arctic supported by technology.

Unique Session ID = 574

#### **4.0.21 Towards H-MOSAIC: Human-centered Multidisciplinary distributed cO-productive collaborative for the Study of Arctic Communities**

**Convener:**

Andrey Petrov

**Andrey Petrov**  
**University of Northern Iowa**

##### Session description

International multi-, inter- and transdisciplinary research in social sciences in the Arctic is a rapidly growing and increasingly important part of the Arctic sciences portfolio. With a large number of Arctic human systems dynamics research projects, observations, data collection and analysis efforts already in place and planned in the near future, there is a need to strengthen coordination and collaboration among these geographically and topically diverse research initiatives. The need for further coordination and synthesis in Arctic social sciences research is also critically important in respect to social sciences contribution to the upcoming international priority-setting events and processes, such as the preparation for the ICARP IV and IPY.

By bringing together limited resources of each project to pursue shared goals, and by providing additional support to the participating research initiatives, H-MOSAIC will build value-added synthesis and methodological products not attainable by individual projects. H-MOSAIC will also capitalize on experiences by other collaborative circumpolar initiatives, such as MOSAIC and T-MOSAIC. H-MOSAIC round table will focus on the following topics: Research coordination in social and human-natural systems using existing resources by partnering project; Research synthesis to develop new insights into Arctic social and human systems; Promotion of Indigenous, inter/transdisciplinary and coproductive methodologies; Research synthesis to identify, amplify and strengthen the links between Indigenous and Western knowledge, science and methodologies; Advancement of Arctic social science data initiatives.

Contributions pertaining to any of these topics are welcome, and all researchers interested in H-MOSAIC are welcome to attend and participate in discussion.

Unique Session ID = 632

## 4.1 Adaptive capacities in the Arctic

### 4.1.1 Adaptive capacity of workplaces in the changing Arctic

**Convener:**

Sirkka Rissanen

**Co-convener:**

Hans Pettersson

**Sirkka Rissanen<sup>1</sup>, Hans Pettersson<sup>2</sup>**

**<sup>1</sup>Finnish Institute of Occupational Health, <sup>2</sup>Umeå University**

Session description

The focus of the session is to increase awareness of the adaptive capacities of workplaces from an occupational health and safety point of view in the changing Arctic. Several Arctic occupations such as tourism, transportation, fishing and aquaculture, agriculture, reindeer herding are influenced by climate change. Also, traditionally heavy industries, such as construction, forestry and open pit mining, are influenced by the direct and indirect impacts of the changing weather. The aim of the session is to introduce state-of-art research on current and/or planned preparedness and practices of Arctic workplaces considering climate change, harsh weather, remoteness, and vulnerabilities. We invite papers which extend our knowledge of the impact of the climate change on physical or mental performance of workers and on occupational safety as well as of the preventive or adaptive methods to mitigate such effects in the Arctic workplaces. The session gives opportunities to exchange experiences on education and share research results in the fields of occupational health and safety, physiology, psychology, and medical support of labor. The session is open and we welcome young researchers at their early careers as well as experienced professionals to share their research studies with us. The language of the session is English.

Both oral and poster presentations are welcome.

Unique Session ID = 407

#### **4.1.2 Harmonizing conservation and livelihoods: predator-people interactions in the Arctic**

**Convener:**

Clément Massé

**Co-convener:**

Thora Herrmann

**Clément Massé, Thora Herrmann  
University of Oulu**

##### Session description

The Arctic is home to both herding practitioners and endangered populations of large predators (such as wolverine, wolf, bear, lynx, sea eagle, ...). In northern Finland and Scandinavia, the conservation goals for populations of endangered large carnivores can compete with Indigenous and local livelihoods, triggering regional human-wildlife conflicts. Enhancing successful management and ecological monitoring of predator populations in Arctic regions requires a thoughtful incorporation of experience-based forms of local knowledge, alongside scientific knowledge. Involving Indigenous communities, local people and organizations into the much-needed co-generation of knowledge on predators' ecology in the Arctic would foster a more comprehensive and culturally sensitive approach to conservation and management efforts. In this session, we welcome contributions that showcase practical examples of effective management and joint ecological monitoring of predator populations across the Arctic, especially in predator-prey-human co-inhabited areas. We particularly encourage submissions that explore novel methodological approaches for co-generating carnivore ecological knowledge and species monitoring in collaboration with local communities. Additionally, we welcome submissions that highlight the use of interdisciplinary approaches in predator monitoring, management and conservation. Contributions shedding light on the societal relevance, challenges and opportunities of predator-prey-livelihood socio-cultural, ecological and economic interactions are highly appreciated and welcomed.

Unique Session ID = 605

### **4.1.3 Indigenizing community-based environmental monitoring – pathways to co-learning, co-generating knowledge, empowerment and action**

**Convener:**

Catherine Dussault

**Co-convener:**

Thora Herrmann

**Catherine Dussault<sup>1</sup>, Thora Herrmann<sup>2</sup>**

**<sup>1</sup>Laval University, <sup>2</sup>University of Oulu**

#### Session description

Researchers across the Arctic have been urged to engage in respectful, equal relationships with Indigenous rightsholders and Indigenous knowledge systems (Wilson, 2008; Smith, 2021; Degai et al., 2022) in order to break with the bleak legacy of research that has been and still can be colonial, extractive and disrespectful. Research protocols are being developed to address the injunction of decolonizing research. In environmental research, community-based environmental monitoring that builds across Indigenous and non-Indigenous knowledges, relationalities, and practices can enhance mutual trust, collective comprehension of the environment, effective environmental management, and governance (Reed et al., 2020; Parlee et al., 2021). In the context of Indigenous sociopolitical resurgence, such collaborative and co-creative research practices in the Circumpolar North are recognized for providing innovative solutions to environmental challenges and promoting positive change through empowerment. While these methods hold promise, they do come with their share of challenges, as they might reproduce power inequalities or bias. Far from diminishing the value of these practices, we aim to explore the methodological and ethical challenges we encounter in the field - including upstream and downstream - to encourage reflexive discussions on positionality as (non-)Indigenous researchers, and to engage critically with western and Indigenous epistemologies, in order to create reciprocal teaching and learning opportunities. We invite Indigenous and non-Indigenous researchers, practitioners, artists, and community representatives to share their experience and explore how decolonial research methods, data sovereignty, the embrace of different knowledge systems/epistemologies/ ontologies, disciplines or fields can create pathways for meaningful forms of research engagement, empowerment and action.

Unique Session ID = 455

#### 4.1.4 Mobility Governance and Transport Diplomacy in the Arctic

**Convener:**

Luc Ampleman

**Co-convener:**

Luc Ampleman

**Luc Ampleman, Luc Ampleman**  
**Jagiellonian University**

Session description

Arctic regions face shared mobility challenges due to their unique geographic, economic, political, and demographic characteristics. These challenges include the diversity and significance of all transport means (maritime, air, terrestrial, including Offroad vehicles), high infrastructure and operational costs, difficulties in applying national political criteria in remote areas, and limited access to resources required to maintain safe, sustainable, and operational transport systems. However, Arctic regions also differ in their transport needs and concerns, following their asymmetrical political governance, historical development, economic disparities, and mobility behaviours.

For policymakers and practitioners, the planning and implementation of transport initiatives in the Arctic involve numerous stakeholders and are further complicated by global threats like pandemics, energy insecurity, climate change and recent political conflicts. Concomitantly, there is also an increasing sensitivity for transport justice, inclusivity, and social acceptability.

We invite researchers from academic and institutional backgrounds to submit paper proposals and share their insights on the governance of transport systems in the High North. Topics of interest include, but are not limited to:

- Political tensions between stakeholders surrounding transport initiatives (or absence of initiatives).
- (Un)successful cooperation strategies about road, rail, maritime, air, offroad, and pipeline transport..
- Barriers, enablers to sustainable transport development in Arctic local communities.
- Co-participation and integration of Indigenous and local knowledge in transport decision-making.
- Comparative experiences in mobility management, addressing gaps, transport justice, and disruptions affecting the mobility of people and freight.
- The impact of current policies on the future of Arctic transport.

Unique Session ID = 482

#### **4.1.5 Institutional and organizational resilience during the COVID-19 pandemic**

**Convener:**

David Cook

**Co-convener:**

Lára Jóhannsdóttir

**David Cook, Lára Jóhannsdóttir**  
**University of Iceland**

Session description

COVID-19 has had a profound implication for institutions and organizations in the field of human resource management, where the issues are more challenging when crises occur compared to a stable external environment. This raises questions about how well institutions and organizations were prepared when the crisis hit, and if and how they managed to adapt to the situation. Major work-related impacts were evident, both positive and negative, and hard and soft elements of human resource management were present, although hard solutions were more evident, such as with layoffs, pay cuts and reduced working hours (Edvardsson & Durst, 2021; Jóhannsdóttir et al., 2022). The main focus of this session will be on institutional and organizational resilience in the Arctic, with a specific focus on the human resource management side of the issue.

In the proposed open session, researchers are invited to share the outcomes of their studies relevant to the theme of the session. Researchers will present their findings, followed by questions from the audience.

Unique Session ID = 486



#### **4.1.6 Living in and with changing Arctic landscape(s): revisiting human and non-human entanglements in a time of flux**

**Convener:**

Joann Conrad

**Co-convener:**

Kristinn Schram

**Joann Conrad<sup>1</sup>, Kristinn Schram<sup>2</sup>**

**<sup>1</sup>Diablo Valley College, <sup>2</sup>Univ. of Iceland**

##### Session description

The Arctic, long a source of fascination and fictional(ized) accounts, has been imagined as timeless and immutable. This is belied not only by a constantly morphing landscape due to natural forces, but also by the changes brought about by the intertwining of nature and culture in human-nonhuman relationships and encounters at the world's northernmost limits. In the Arctic, the geological, climatological, social and cultural shifts that define the Anthropocene are extreme and accelerating.

The various imaginaries of the Arctic have been shaped by historical contingency and intersect with a host of positionalities -- progress/heritage; urban/rural; sedentary/migratory; human/non-human; Nature/Culture; male/non-male; colonizer/colonized, most based on a binary logic that is hierarchical and confrontational and that historically has brought the world to the brink.

In this panel we revisit multiple ontologies that enact situated knowledges in the environment; those ways of thinking and being in the Arctic that might recalibrate the destructive binarism. We ask, how are flora, fauna, geological formations, resources, waterways, glaciers, etc., and the human experiences in and with these experienced and apprehended in different ways in different ontological systems? We invite discussion on these intersections from a number of disciplinary perspectives, including folklore, heritage studies, post-human studies, tourism studies, visual culture, and material culture, as well as from different positionalities vis a vis the Arctic, including developers, industrialists, environmentalists, and indigenous populations, to ask if these perspectives might present alternate modes for thinking of and coexisting in our fragile and threatened world.

Unique Session ID = 507

#### **4.1.7 Supporting Leadership in Arctic Communities: An exploration of the spaces and places that could and should enable self determination in local research practice**

**Convener:**

Sarah-Anne Thompson

**Co-convener:**

Nicolas Brunet

**Sarah-Anne Thompson, Nicolas Brunet  
University of Guelph**

##### Session description

Local knowledge and skills are a critical pillar of robust, relevant, and ethical Arctic research. Best practices in present-day Arctic research mandate local involvement and leadership at all stages of research design, data collection, analyses, and dissemination. In this evolving era of community-engaged research, the knowledge and skills of Arctic-based people, organisations and institutions are extremely sought after by visiting researchers.

However, community-engaged research requires capacity that supports local people to take part in, and lead, all stages of the research process. Local research capacity is multi-dimensional, involving skills, knowledge, resources, and infrastructure. Despite their involvement and leadership being in high demand, Arctic communities often lack the same capacities and resources offered in traditional research institutions. In order to fully realized the potential of community-engaged research, diverse and sustained local capacity increases are required.

While many conversations have established the 'what' and 'why' of community-engaged Arctic research, this session seeks to dissect lesser discussed aspects of the 'how' and 'where'. Presenters will confront often 'invisible' issues regarding the places and spaces of communitybased research occurring in communities, with conversations around the current status of community research infrastructure, innovations, and future needs. Drawing on multiple Western disciplines from sociology, architecture, planning and development, and Inuit Qaujimaqatunqangit, learning outcomes will include ways to adapt your research to bolster local research capacity, how to mitigate such invisible barriers to community leadership in research, and what opportunities exist to foster long-term capacity increases in the Arctic.

Unique Session ID = 518

#### **4.1.8 “Can Infrastructure Contribute to Sustainability? The Built Environment and Arctic Communities”**

**Convener:**

Ria-Maria Adams

**Co-convener:**

Alexandra Meyer

**Ria-Maria Adams, Alexandra Meyer**  
**University of Vienna**

Session description

This session investigates the role of the built environment and infrastructures in enabling and promoting sustainable and viable Arctic communities. We understand infrastructures as “terrains of power and contestation” (following Anand, Gupta and Appel, 2018) and the built environment forming a relation between humans, non-humans and technology (Larkin, 2018). Infrastructures and built environments are often described as a crucial interface between environmental change and community dynamics. They simultaneously create dependencies and promises of development, and are often contested locally. We understand infrastructures in the broad sense, encompassing material and immaterial aspects.

The aim of the session is to explore the implications of existing and planned infrastructures in the Arctic, and how they actualize complex relationships between supra-local actors and local communities. Furthermore, we want to discuss the role of ethnographic research on infrastructure and the built environment. In this, we seek contributions on topics ranging from the role of transport infrastructures for Arctic communities, debates on the “Green Transition”, conflicts over infrastructure, tourism, military infrastructure, to resource extraction. In this context, we encourage critical reflections on the notion of “sustainability”, as well as its relation to infrastructures and the built environment.

By facilitating interdisciplinary discussions and by highlighting ethnographic perspectives, this session intends to deepen our understanding of the relationship between the built environment, infrastructures, and sustainability in Arctic communities.

Unique Session ID = 567

#### **4.1.9 Sustainability Research and Practice in the Arctic: Concepts, Approaches, Opportunities and Emerging Agenda**

**Convener:**

Andrey Petrov

**Andrey Petrov**  
**University of Northern Iowa**

##### Session description

This session will discuss the development and evolution of Arctic sustainability research in the last decade, as well as will focus on successful and problematic practices and policies in sustainability work across Arctic communities and regions. Sustainability science in the Arctic has emerged as a distinct sphere of fundamental and applied knowledge that broadly engages disciplines, communities and ways of knowing to produce practically tangible results in sustaining Arctic social-ecological systems (SES). A rapid progress in sustainability research invokes multiple conceptual, methodological and policy perspectives to managing SES. Sustainability work pioneered highly transdisciplinary and co-productive approaches to understanding current and future SES dynamics and will continue to be a flagship area of research for bridging disciplines, knowledge systems and practices.

The papers in this session will address ontological, epistemological, methodological, practical issues and community experiences of sustainability research and policymaking in the Arctic and Sub-Arctic at global national, regional and local scales. They will also examine knowledge gaps and explore possible future directions that can inform research agenda in Arctic sustainability science for the forthcoming decade, including ICARP IV and IPY 5 priorities. The session will also constitute an inaugural gathering of the IASSA Sustainability Knowledge Working Group (SKWG).

Unique Session ID = 627

#### **4.1.10 Indigenizing Arctic Research: Indigenous-led Strategies for Research in the Arctic (ICARP IV and Beyond)**

**Convener:**

Varvara Korkina Williams

**Co-convener:**

Dalee Dorough

**Varvara Korkina Williams<sup>1</sup>, Dalee Dorough<sup>2</sup>**

**<sup>1</sup>Institute of Arctic Studies, Dartmouth college, <sup>2</sup>University of Alaska, Anchorage**

##### Session description

In light of the growing emphasis on equity and Indigenous leadership in co-productive and applied Arctic research, it is imperative to involve Arctic Indigenous Peoples directly in shaping global research agendas within their homelands. This panel session at the Arctic Congress aims to explore the practical aspects of "Indigenizing Arctic research," its intended benefits for Arctic Peoples, science, and broader societies, and identify strategic opportunities for implementation.

Indigenizing Arctic research goes beyond ensuring the self-determination of Indigenous peoples; it also entails enhancing scientific practices by encouraging researchers, universities, funding agencies, and partner organizations to actively and collaboratively support stewardship, human rights, and the well-being of vibrant Arctic communities.

These discussions are of utmost importance and timeliness as part of the ongoing engagement process with Arctic Indigenous Peoples to inform and influence the Fourth International Conference on Arctic Research Planning (ICARP IV), set to culminate in 2025, as well as the upcoming International Polar Year (2032/33) and other significant Arctic research planning initiatives. Building upon a recent series of informal convening with diverse Indigenous leaders and communities across the Arctic, held from Fall 2022 to Spring 2023, this session will delve into "Indigenizing" approaches and priorities.

Unique Session ID = 515

#### **4.1.11 Restoring sustainable food systems, livelihoods and ecosystems in the Arctic**

**Convener:**

Majken Paulsen

**Co-conveners:**

Camilla Risvoll  
Camilla Brattland  
Julien Lebel  
Maiken Bjørkan

**Majken Paulsen<sup>1</sup>, Camilla Risvoll<sup>2</sup>, Camilla Brattland<sup>3</sup>, Julien Lebel<sup>2</sup>, Maiken Bjørkan<sup>2</sup>**  
**<sup>1</sup>Nordland Research Institute, <sup>2</sup>NRI, <sup>3</sup>UiT Norges Arktiske universitet**

Session description

Arctic environments and communities are experiencing rapid change. A warmer climate is an important driver of change, but a myriad of other factors also play a major role, such as effects from fishing, tourism, shipping, new or introduced species, demography and other changing socio-economic conditions. Ongoing climate and environmental changes, such as retreating sea ice and changing pasture conditions for livestock and reindeer, is bringing both new opportunities and challenges. Fisheries, shipping, tourism and oil and gas exploitation are expected to benefit from new environmental conditions in the Arctic. Yet, the burden on fragile ecosystems may increase further in connection with the expansion of human-related activities. Deteriorating ecosystems are already affecting the structure of Arctic food systems, with ramifications for livelihoods such as tourism and resource-based harvest. How do we work to restore food systems, livelihoods and ecosystems in the Arctic to prevent further environmental deterioration and to create the necessary conditions for thriving communities and local economies? With a point of departure in the ongoing research projects FACE-IT and Future Arctic Lives, this session invites research on efforts to restore food systems and livelihoods in Arctic communities.

Unique Session ID = 584

## 4.2 Public health and wellbeing, including mental health and digital health solutions

### 4.2.1 Transformative Responses: Fostering mental health and community resilience in remote Arctic Communities in the face of COVID-19

**Convener:**

Lára Jóhannsdóttir

**Co-conveners:**

Josée G. Lavoie

Malory K. Peterson

Suzanne Fox

Lena Maria Nilsson

**Lára Jóhannsdóttir<sup>1</sup>, Josée G. Lavoie<sup>2</sup>, Malory K. Peterson<sup>3</sup>, Suzanne Fox<sup>4</sup>, Lena Maria Nilsson<sup>5</sup>**  
**<sup>1</sup>University of Iceland, <sup>2</sup>University of Manitoba, <sup>3</sup>Montana State University, <sup>4</sup>The Yellow Tulip Project, <sup>5</sup>Umeå University**

Session description

The COVID-19 pandemic has had far-reaching implications for well-being in remote Arctic communities, which have been challenged by distance from critical health infrastructure, including hospitals. Vulnerable demographic groups, including young people, the elderly, and those with weak social networks, have been disproportionately affected, with immigrant and migrant worker populations also impacted. In this session we present research from Iceland, Sweden, Canada, and Greenland, and the United States revealing innovative strategies to empower communities, whether in responding to a global health crisis or in tackling the stigma surrounding mental health. We highlight formal protocols and informal innovations adopted by local communities and contextualize the impact of COVID-19 prevention measures in Inuit and Sámi communities in the Arctic. The research presented can inform intergovernmental collaboration to support community-directed responses to future public health emergencies and other related environmental risks that Arctic countries may experience in the future. This integrated discussion is valuable for policymakers, healthcare professionals, and those working with Arctic communities, offering a holistic perspective on addressing challenges and fostering resilience in these unique and remote regions.

In the proposed open session, 3-4 researchers are invited to share the outcomes of their studies relevant to the theme of the session. This is followed by a roundtable discussion where the audience are engaged in a dialogue with support from the session moderator.

Unique Session ID = 665

## 4.2.2 Enhancing Healthcare Service Delivery in the Arctic: A Focus on Sustainability and Public Health

**Convener:**

Lisa Schwarzburg

**Co-convener:**

Antonina Tsvetkova

**Lisa Schwarzburg<sup>1</sup>, Antonina Tsvetkova<sup>2</sup>**

**<sup>1</sup>University of Alaska Anchorage, <sup>2</sup>Molde University College – Specialized University in Logistics**

### Session description

We offer this session to allow presenters across the Arctic to share the advances and challenges experienced in developing, maintaining, evaluating and improving effective, sustainable, socially responsible healthcare delivery systems in their respective areas.

We invite health program developers, systems analysts, healthcare system evaluators, medical anthropological and sociological research scientists; along with community health leaders, epidemiologists, logistics and policy experts and analysts from across the circumpolar north to help us learn about the importance of accounting for environmental and sociocultural sustainability in our work in healthcare delivery in the Arctic.

Studies focusing on the unique features necessary to explore when dealing with all areas of healthcare delivery in the Arctic, from climatic and environmental to sociocultural labor or supply issues, including One Health perspectives, are welcome for consideration. Those focusing on the elements of economic and social responsibility and sustainability, however, are most preferred. Any abstracts that involve indigenous healthcare delivery in the Arctic will also be given special consideration. Both posters and oral presentations will be considered, please indicate preference (or note that either is fine) when submitting proposed abstracts.

Strategies from local- and community-based models will be included in this session that focuses on economic, sociocultural sustainability in equitable and environmental healthcare delivery systems throughout the Arctic.

Unique Session ID = 412



### 4.2.3 Interdisciplinary Perspectives on Community Health and Wellbeing in the Changing Arctic

**Convener:**

Anu Soikkeli

**Co-conveners:**

Jessica Graybill

Elena Grigorieva

Ketil Lenert Hansen

Rainer Lohmann

**Anu Soikkeli<sup>1</sup>, Jessica Graybill<sup>2</sup>, Elena Grigorieva<sup>3</sup>, Ketil Lenert Hansen<sup>4</sup>, Rainer Lohmann<sup>5</sup>**

**<sup>1</sup>University of Oulu / Oulu School of Architecture, <sup>2</sup>Colgate University, Russian and Eurasian Studies Program, <sup>3</sup>Humboldt-Universität zu Berlin, Geography Department, <sup>4</sup>The Arctic University of Norway, Public Health / Institute of Sámi Teaching Education and Indigenous Journalism Study, Sámi University of Applied Sciences, Indigenous Pedagogy, <sup>5</sup>University of Rhode Island, Marine and Atmospheric Chemistry**

Session description

While many transnational, national, and regional policies and practices address individuals, community health and wellbeing are achieved collectively and with the understanding that the human-animal-environment nexus is crucial to overall community resilience. A focus on community-oriented, non-clinical approaches that aim to prevent disease, reduce health disparities, and improve overall wellbeing is needed to address health challenges in the rapidly transforming Arctic of the 21st century. There is a need to identify social, behavioral, environmental, and economic factors currently challenging community health. Communities across the Arctic include critical demographic groups—youth, elders, Indigenous peoples, and newcomers, such as recent (less than 10 years) migrants—with different health priorities and a multipronged approach to assist different communities and demographic groups is needed.

This session focuses on research integrating social, scientific, and engineering approaches to understand and improve the community well-being. This session aims to engage researchers from many disciplines in this conversation and share excellent case studies and frameworks within the research community, and also seeks input from inter-, and transdisciplinary scientists who have developed toolkits, frameworks, smart practices, and other methods or case studies of translating science into action.

Unique Session ID = 599

## 4.3 Arctic cultures and arts

### 4.3.1 New Genre Arctic Art and Art Education

**Convener:**

Timo Jokela

**Co-conveners:**

Ekaterina Sharova

Anastasia Deyko

**Timo Jokela<sup>1</sup>, Ekaterina Sharova<sup>2</sup>, Anastasia Deyko<sup>3</sup>**

**<sup>1</sup>University of Lapland, <sup>2</sup>APECS Arts, <sup>3</sup>APECS Art group**

Session description

This session (exhibition) welcomes submissions relate to New Genre Arctic art. The concept refers to Indigenous and other artistic expressions, interventions, and new forms of crafts and cultural heritage sharing an interest in the Arctic's material culture and handmaking skills.

We are interested in submissions exploring the potential of arts for future making in the Arctic region. While art has used to depict Arctic from the outsider's perspective, the people of the Arctic have gained the agency to make internationally recognised art themselves rather than being observed and pictured by visitors to the Arctic. We collect and pool artwork and documents of artistic practices from different parts of the circumpolar world and illuminate artists' and art educators' engagements and agency. Such contemporary art and art education tackle local ecoculture, natural resource extraction, politics, identities, and cultural continuation, and fosters cultural resilience and sustainability. The attention of the exhibition follows the global paradigm shift focusing on collaborations with more-than human nature, knowing with nature and encounters with material world. Also, the pedagogical turn of contemporary art is embedded in the new genre Arctic art.

The session calls for artwork proposals to be shared in an online exhibition and /or in situ.

The proposed exhibition is aimed at involving various visual media ranging from traditional art to mixed-media installations and performances to pedagogical documentations. It is planned to unfold throughout this Congress in different venues in Bodö and/or online.

Unique Session ID = 672

### **4.3.2 Looking for Sources of Resilience through Arts, Science, Local and Indigenous Knowledge (ArtSLInK): experience of Arctic StoryWorlds**

**Convener:**

Vera Kuklina

**Co-convener:**

Olga Zaslavskaya

**Vera Kuklina<sup>1</sup>, Olga Zaslavskaya<sup>2</sup>**

**<sup>1</sup>The George Washington University, <sup>2</sup>Independent curator**

Session description

The session aims to bring together interim results of several ongoing research projects where the ArtSLInK (Arts, Science, Local and Indigenous Knowledge) approach was used to develop a collaboration between scholars, artists, and a curator to create a multi-year transmedia storytelling project. This approach is based on the idea of the convergence of arts, science, and local and indigenous knowledge that encourages scientists to consider the social, cultural, and ethical dimensions of their work, fostering a more inclusive and participatory work to address complex societal problems and designing sustainable futures. It promotes the recognition of the value and wisdom embedded in Indigenous and local knowledge systems. Artistic expressions make scientific and local and Indigenous concepts more accessible and engaging to the general public. It also emphasizes the importance of creativity and imagination in shaping the future. In particular, the session will be supplemented by an exhibition where Indigenous and non-Indigenous artists and scholars reflect on urban sustainability and in what formats, scopes, and outcomes they can present their reflections at the stage of observation as a common research method. While scholars discuss their outcomes during the session, artists present their works of mapping, telling stories and visualizing them through art-based research. Together, they create a transmedia storytelling project that includes an exposition of photographs taken both by photographers and scholars, artistic objects and installations with scholarly commentaries as extended captions, and video installations. Experience of organization of such exhibition can be valuable for future development of knowledge co-production.

Unique Session ID = 534

### 4.3.3 Arctic Indigenous Sound- and Voicescapes

**Convener:**

Dmitry Arzyutov

**Co-convener:**

Richard Fraser

**Dmitry Arzyutov<sup>1</sup>, Richard Fraser<sup>2</sup>**

<sup>1</sup>The Ohio State University, <sup>2</sup>UiT - The Arctic University of Norway

Session description

This is a panel which explores the intersection between sound and cultural heritage amongst Arctic Indigenous peoples. Inspired by sonic anthropology and history, it asks how we might approach sound and voice making as a form cultural heritage and the methodological, theoretical, epistemological, and ontological implications associated with this.

Submissions might include studies of historical recordings of sounds such as traditional music, voices, or ritual performances (e.g., in the form of 'obsolete' media such as wax cylinders), to contemporary music, Indigenous vocalisations, or even silence.

They also need not focus on organised sounds but might include emergent or sonic phenomena such as the cultural experience of echoes and reverberations, as well as Indigenous ideas of ambient, found, or naturally occurring sounds in builtscapes or landscapes.

We ask you to consider:

- Sounds and voices as a form of cultural heritage;
- Sound- and voicescapes in the context of museums, repatriation, and digital sharing;
- The ways Indigenous people experience and think about sounds and voices, both in the past and present;
- Sounds and voices in Arctic landscapes, in terms of place, space, distance, the rural and the urban;
- Sounds, voices, and Arctic Indigenous ontologies, including the auditory dimensions of more-than-human relations;
- Sounds and voices in research fieldwork, writing-up, and in Indigenous methodologies;
- Sounds and voices in activist and environmental movements;
- Sounds and voices in cultural and linguistic revitalisation.

We welcome submissions from anthropology; ethnomusicology; acoustics; history; and philosophy; as well as those working in recording, composition, film, mixed media, art installation, and performance.

Unique Session ID = 454

#### 4.3.4 Strengthening Indigenous language vitality in the Arctic

**Convener:**

Lenore Grenoble

**Lenore Grenoble**  
**University of Chicago**

##### Session description

In recognition of the importance of language to Indigenous identity and culture, UNESCO has declared 2022-2032 the International Decade of Indigenous Languages. In the Arctic, a significant percentage of the population is Indigenous, and Arctic Indigenous languages are experiencing considerable pressure due to a variety of factors. These include climate change, economic development, and migrations (both permanent and temporary), a massive increase in tourism and a massive increase in internet availability, which introduces yet another pathway for language entry. These factors combine to bring in more speakers of majority languages, newcomers and outsiders who put pressure on Indigenous residents to communicate in the national language and/or English, the global lingua franca. Despite the challenges they face, Arctic peoples are embracing use of their languages and developing their languages to meet the needs of future generations.

In this session we welcome papers that discuss methods for bolstering Indigenous language vitality and sustainability, with attention to both successes and challenges. Possible topics include (but are not limited to): language revitalization, formal education programs, the development of digital content, pedagogical and reference materials aimed at increasing language knowledge, the role of literacy and orthographies in bolstering language mechanisms for fostering language use, and the implementation of L2 language programs for Indigenous groups and outsiders.

Unique Session ID = 611

### 4.3.5 Language structure and language use in a changing Arctic

Convener:

Jessica Kantarovich

**Jessica Kantarovich**  
**The Ohio State University**

#### Session description

Arctic communities are currently the sites of rapid change, both social and climatological: globalization, coupled with warming temperatures, has made Arctic regions more accessible than ever before. In particular, urban areas are seeing increasing numbers of migrants in search of work as well as (eco-)tourists interested in visiting the remote cities and landscapes of the Far North. Remote Arctic areas are also increasingly "plugged in," with more reliable access to the internet and, in turn, far-ranging modes of communication and information-sharing. The result has been increasing cultural and linguistic contact between Arctic peoples and outsiders (i.e., speakers of majority languages), as well as among different Arctic communities that are separated by enormous geographic distances.

Differences in societal structure have long been thought to condition differences in language structure and use, particularly when comparing small-scale intimate societies and urban settings with ever-changing social networks. This session invites papers that engage with the ways that changing social ecologies are affecting all aspects of language use in the Arctic, including (but not limited to) language structure, multilingualism and translanguaging, and language identity and ideology. Examples of potential topics might be contact-induced change, code-switching, the emergence of new mixed languages, linguistic landscapes, urban language/metrolingualism, and language variation.

While submissions that relate to this session's theme about language in the context of changing conditions in Arctic communities are preferred, we welcome all submissions about the linguistic structure of Arctic languages, from descriptive, anthropological, typological, or formal perspectives.

Unique Session ID = 634

## 4.4 Gender equal and inclusive Arctic communities

### 4.4.1 Asian migrants in the Arctic: Research with migrants from Asia in Arctic communities, with focus on labor market and social cohesion

**Convener:**

Zdenka Sokolickova

**Co-convener:**

Kristine Juul

**Zdenka Sokolickova<sup>1</sup>, Kristine Juul<sup>2</sup>**

**<sup>1</sup>Arctic Centre, University of Groningen, <sup>2</sup>Roskilde University**

#### Session description

The Arctic is increasingly becoming a place for migration from Asia (e.g. Thailand, the Philippines, China and beyond). People move to Arctic settlements with various motivations and expectations, using a wide range of migration channels, with varied plans regarding staying and returning. Some arrive alone or in couples, others join their relatives, while others again bring their children or found families in their new Arctic homes. It is known that labor migration and family reunification belong to the most common stimuli but there is a huge potential in comparing different case studies of Asian migrants living and working in distinct Arctic locales, spotting similarities and unpacking differences. The session welcomes presentations based on empirical research with Asian migrants in settlements across the Arctic, exploring the broad implications of this rather recent phenomenon. We wish to focus especially on their integration in the labor market and issues related to their social inclusion in the receiving communities, and also the aspect of children and youth (of Asian origin and Indigenous/local vis-a-vis their interaction). The conveners hope for a geographically wide range of case studies anchored in human geography, economics, tourism studies, anthropology, sociology and other social sciences and humanities that can contribute with different perspectives. We accept suggestions for talks and posters but are also open to alternative proposals (e.g. small exhibitions, short screenings or other events complementary to the session). ECRs and speakers from the studied communities, including representatives of Asian migrants are particularly welcome as presenters.

Unique Session ID = 580

#### 4.4.2 People with disabilities in the Arctic: Experiences and perspectives

**Convener:**

Birgit Paukštat

**Co-conveners:**

Tove Mentsen Ness

Merete Kvamme Fabritius

Trond Bliksvær

**Birgit Paukštat<sup>1</sup>, Tove Mentsen Ness<sup>2</sup>, Merete Kvamme Fabritius<sup>1</sup>, Trond Bliksvær<sup>1</sup>**  
**<sup>1</sup>Nordland Research Institute, <sup>2</sup>Centre for Saami and Indigenous Studies**

Session description

Over the past years, there has been an increasing focus on diversity and inclusion. However, people with disabilities are often overlooked. To date, a few studies, mostly from a medical perspective, have started to shed light on the prevalence of specific impairments in Arctic communities. Still less attention has been paid to the lived experiences of people with disabilities within their social, cultural, political, geographical and historical context, which, according to the “social model” of disability, may play a key role in “enabling” or “disabling” people with impairments.

The aim of this session is to bring together researchers and practitioners from a broad range of disciplines interested in the experiences and inclusion of people with disabilities in the Arctic. We invite presentations addressing experiences, knowledge and practices from different perspectives in order to identify directions for future research and opportunities for collaboration. Possible topics for presentations include (but are not limited to):

- Experiences of people with disabilities in the Arctic
- Perspectives of family, community members, co-workers and professionals (e.g. teachers, social workers, administrators)
- Case studies in different cultural and/or historical contexts
- Challenges and best practices concerning the inclusion of people with disabilities in different contexts (e.g., education, workplace, community life) in Arctic communities or when moving south for care or access to services
- Accessible tourism in the Arctic
- Accessibility of Arctic research to researchers and stakeholders with disabilities

Unique Session ID = 459



#### 4.4.3 Intersectional Gender Equality within Academia - Exploring Sustainable Futures in the Arctic

**Convener:**

Mervi Heikkinen

**Co-conveners:**

Anna R. Rönkä

Kirsti Lempiäinen

Britt-Inger Keisu

Lena Abrahamsson

Lilli Mittner

**Mervi Heikkinen<sup>1</sup>, Anna R. Rönkä<sup>1</sup>, Kirsti Lempiäinen<sup>2</sup>, Britt-Inger Keisu<sup>3</sup>, Lena Abrahamsson<sup>4</sup>, Lilli Mittner<sup>5</sup>**

**<sup>1</sup>University of Oulu, <sup>2</sup>University of Lapland, <sup>3</sup>Umeå University, <sup>4</sup>Luleå University, <sup>5</sup>UiT The Arctic University of Norway**

Session description

Arctic universities are engaging with a process of developing resilient, diverse, and inclusive Arctic communities and contributing to it via knowledge co-production. However, intersectional gender inequality is a pervasive issue in societies, in the northernmost societies, as well as in Arctic higher education institutions (HEIs), alike. It is linked with unfulfilled potential of all people to participate in academic knowledge production and thus knowledge production practices suitable to Arctic communities. Studies have focused on women, indigenous Peoples, and minorities as knowledge holders and in challenges pursuing their academic careers, but also in academic masculinities and strategies, policies, plans and curricula. Inequality is also linked with horizontal and vertical gender segregation within disciplines, which is further connected with occupational segregation and gender pay gaps, as well as various biases reproduced.

There is a general shortage of research knowledge regarding intersectional gender equality in circumpolar and Arctic areas, more specifically in HEIs. Yet, some work has been already done e.g., decolonization of knowledge. The aim of this session is to explore the meaning of intersectional gender equality in the Arctic knowledge production and its evolving methodologies, e.g. participatory methods and citizen sciences as well as potential implications of intersectional gender equality work at the HEIs. We invite papers to the session and would like to consider them to a book proposal on Intersectional Gender Equality in Academia - Exploring Sustainable Futures in the Arctic.

Session is organised by the NOS-HS researchers network on the theme: <https://www oulu.fi/en/projects/intersectional-gender-equality-academia-arctic-north>

Unique Session ID = 563

#### **4.4.4 The Gender Dimension of Environmental Observation, Monitoring, and Assessment in the Arctic**

**Convener:**

Tahnee Prior

**Co-convener:**

Malgorzata Smieszek-Rice

**Tahnee Prior, Malgorzata Smieszek-Rice  
Women of the Arctic**

Session description

Gender plays a critical role in human–environment relationships. A person’s gender affects how they interact with their surroundings, the activities that they engage in, as well their observations of the environment itself. The role that gender equality plays in environmental protection and sustainable development is increasingly also acknowledged, globally and in the Arctic.

However, as is highlighted in the “Gender & Environment” chapter in the 2021 Pan-Arctic Report on Gender Equality in the Arctic, the (un)conscious inclusion, or exclusion, of environmental observations based on gender can, at times, lead to bias in the assessment of various issues, from climate change to pollution. Meanwhile, gender-based barriers to equitable access to, and participation in, environmental policy-shaping and -making across issue areas, including natural resource management and various conservation efforts, remain.

Building on the priorities of the Norwegian Chairship of the Arctic Council (2023-25) - and inspired by the ongoing work of Arctic PASSION, the EU-funded Horizon 2020 project, which aims co-create and implement an Arctic observing system that addresses the urgent needs of people living in the Arctic - this panel seeks to examine the gender-dimension of environmental observations, monitoring, assessments in the Arctic from various perspectives. Submissions may include, but are not limited to, contributions on:

- gender-based differences in identifying priorities for environmental observation;
- gender-based differences in monitoring environmental change;
- gender-based differences in identifying priorities for environmental management;
- the role of gender in community-based observations;
- integrating gender-based analysis into Arctic environmental assessments;
- methods/methodologies for gathering gender- and sex-disaggregated data on environmental change

Unique Session ID = 562

## 4.5 Inclusion and empowerment of young people in the North

### 4.5.1 Strategies for centering Indigenous voices for Arctic community-led research and co-production of knowledge for early career researchers

**Convener:**

Natasha Haycock-Chavez

**Co-convener:**

Mariama Dryák-Vallies

**Natasha Haycock-Chavez<sup>1</sup>, Mariama Dryák-Vallies<sup>2</sup>**

**<sup>1</sup>Exchange for Local Observations and Knowledge of the Arctic, <sup>2</sup>Polar Science Early Career Community Office**

Session description

Given the history of extractive research in the Arctic, there is increasing recognition amongst researchers about the importance of intentional and respectful engagement and equity with Arctic Indigenous communities. Indigenous researchers and communities are also calling for greater involvement in research, often in the form of community-led research, co-production of knowledge, and/or community-based monitoring. Early career researchers are involved in this type of research and are excellently positioned to be positive agents of change. At the same time, expectations for early career researchers to ‘produce’ on short timelines early in their careers can pose additional challenges to building long-term, respectful, and intentional relationships with communities they are working within in the near-term.

We welcome abstracts for talks from researchers and community members in all stages of their career involved in community-led research or co-production of knowledge to share their work, including lessons, stories, and strategies for successful capacity sharing. We encourage abstracts with an emphasis on how early career researchers working to center Indigenous voices in their research can do so effectively. Stories of success and failures are welcomed, and we intend to create a space for shared learning and reflection. Early career Indigenous researchers are especially encouraged to submit.

This session will be structured to create space for knowledge exchange, capacity sharing, and participation. We will begin the session with a series of talks, and the remaining time will be dedicated to a round table discussion between the panelists and opportunity to hear from and engage with audience-members.

Unique Session ID = 659

## 4.5.2 Shaping Academic education to the need for multidisciplinary future Arctic Experts

**Convener:**

Roland Kallenborn

**Co-convener:**

Jan Borm

**Roland Kallenborn<sup>1</sup>, Jan Borm<sup>2</sup>**

**<sup>1</sup>Norwegian University of Life Sciences (NMBU), <sup>2</sup>Université de Versailles Saint-Quentin-en-Yvelines**

### Session description

The current observed climatic changes in the circum-Arctic environment require new concepts for educating the Arctic environmental experts of tomorrow. These environmental changes are expected to result in dramatic changes in Arctic marine and terrestrial ecology as well as within the cryosphere. Changes are both considered as economic and political opportunities as well as environmental hazards dependent on the intellectual angle. The current developments in the Arctic have, thus, the potential to provide a growing ground for potential conflicts both on a geopolitical, economic as well as environmental protection level. In many Arctic regions, already today the economic benefits of extracting and refining natural resources (i.e. minerals, petroleum, coal, etc) propagated by industrial enterprises are considered by conservation groups as in direct contrast to the urgent need for environmental protection. This situation is confirming the urgent need for balanced and sustainable international coordination in regional regulatory requirements for the Arctic region. The multifaceted requirements for inter-governmental-regional future regulations in the Arctic require comprehensive coverage and balancing all influencing factors. Therefore, a new generation of scientific academic experts must be educated with interdisciplinary expertise in relevant sciences as well as in-depth understanding of indigenous, cultural, regulative, jurisdictional, educational, teacher development, over-tourism and technological needs. Therefore, presentations of new ideas, strategies and concept for academic education concepts shaping transdisciplinary academic teaching concepts are invited and will be discussed. The session will be concluded with a panel discussion.

This session is jointly organised by the University of the Arctic Chairs.

Unique Session ID = 457

### 4.5.3 Inclusion for human resources and competence in the Arctic

**Convener:**

Karin Marie Antonsen

**Co-conveners:**

Merete Kvamme Fabritius

Guro Wisth Øydgard

Ann-Torill Tørrisplass

Lea Louise Videt

**Karin Marie Antonsen<sup>1</sup>, Merete Kvamme Fabritius<sup>1</sup>, Guro Wisth Øydgard<sup>2</sup>, Ann-Torill Tørrisplass<sup>2</sup>, Lea Louise Videt<sup>1</sup>**

**<sup>1</sup>Nordland Research Institute, <sup>2</sup>Nord University**

Session description

Human resources are vital to the maintenance and development of resilient Arctic communities. The ability to adapt to climate change, to be capable to carry out the green transition, as well as to maintain the living conditions of the aging population of the Arctic depend on competence within, and education of, the population. The population decline caused by centralising migration patterns in combination with low fertility rates, and high share of young people nor in education, employment, or training (NEETS) pose an increased threat to the resilience of Arctic communities.

The aim of this session is to bring together scholars and practitioners from a broad range of disciplines interested in education, training, and employment within Arctic communities, and of the inclusion of young people at risk. We invite presentations addressing experiences, knowledge, and practices from different perspectives to identify directions for future research and opportunities for collaboration. Possible topics for presentations include (but are not limited to):

- Experiences of young individuals with inclusion and/or recruitment into education, training, and employment in the Arctic
- Challenges and best practices concerning the inclusion of young people at risk in education, training, and workplace in Arctic communities.
- Challenges and best practices concerning how public and private sector strive or manage to recruit and retain competent employees in the Arctic.
- Challenges and best practices concerning how the educational institutions of the Arctic strive or manage to recruit students from and into the Arctic.

Unique Session ID = 581

#### **4.5.4 A Panel Presentation: A Symposium on Success in Education for the Circumpolar North: Student Success, Teacher Development, and Persistence**

**Convener:**

Kirk Anderson

**Co-convener:**

Kathy Snow

**Kirk Anderson<sup>1</sup>, Kathy Snow<sup>2</sup>**

**<sup>1</sup>Faculty of Education/Memorial University, <sup>2</sup>Faculty of Education/University of Prince Edward Island**

Session description

We seek a symposium to share the work of over 30 northern scholars. We are a mixture of Sami, Indigenous, and allies from Canada, Nordic countries, and the United States from across the Pan-Arctic. We propose an open session. We would have two panel presentations (45 minutes each) sharing and highlighting the articles nearly 20 peer review publications. These working groups, the research, and the publications are exemplary examples of Pan-Arctic cooperation resulting from the UArctic Community and the Thematic Networks, as well as our own host universities. The work is highly reflective of the UArctic's aspirations for its Networks as the research, working groups, and writing was promoted largely by the Networks for Teacher Development and the Verdde Network. The works themes can be found in the titles below as this work was published (even withstanding the pandemic) in two special editions of The Morning Watch: Educational and Social Analysis Journal:

Panel 1: Spring (2022): Student Success and Teacher Development in the North: An Examination of Student Persistence and Teacher Development. See <https://journals.library.mun.ca/index.php/mwatch/issue/view/165>

And

Panel 2: Spring (2021): Education in the Circumpolar North. See <https://journals.library.mun.ca/index.php/mwatch/issue/view/151>

Unique Session ID = 414

#### **4.5.5 Youth engagement to re-imagining the future for northern communities**

**Convener:**

Magalie Quintal-Marineau

**Co-convener:**

Janice Parsons

**Magalie Quintal-Marineau<sup>1</sup>, Janice Parsons<sup>2</sup>**

**<sup>1</sup>Institut national de la recherche scientifique, <sup>2</sup>Qarjuit Youth Council**

Session description

Youth across circumpolar regions contribute remarkable creativity and strength-based solutions to re-imagining the future for their communities. Through wellbeing initiatives, environmental activism, educational and cultural practices or political engagement, Indigenous youth are important agent of social change. The Qarjuit Youth Council in collaboration with Magalie Quintal-Marineau and Michelle Smith, are organizing a discussion panel to share and learn about Indigenous youth contributions to Arctic communities. We invite other northern youth organizations, Indigenous youth leaders and collaborators to contribute to this panel with their perspectives on youth transformative engagement in their society. Specifically, we wish to explore: Indigenous youth leadership, youth-driven initiatives and self-determination as lived and imagined by youth.

Qarjuit Youth Council is an Indigenous youth-led organization dedicated to giving youth the voice they deserve in the modern society by bringing forward Inuit cultural values.

Unique Session ID = 517

#### **4.5.6 Role of Teacher Education in Recognising and Supporting Linguistic and Cultural Diversity**

**Convener:**

Kalpana Vijayarathan-R

**Co-conveners:**

Clare Mouat

Edda Óskarsdóttir

**Kalpana Vijayarathan-R<sup>1</sup>, Clare Mouat<sup>2</sup>, Edda Óskarsdóttir<sup>3</sup>**

**<sup>1</sup>The University of The Faroe Islands, <sup>2</sup>The University of Strathclyde, <sup>3</sup>The University of Iceland**

Session description

Sustainable Development Goal 4 (SDG 4) aims to offer “inclusive and equitable quality education” and promote “lifelong learning for all”, so no student is left behind. The agenda promotes a “just, equitable, tolerant, open and socially inclusive world in which the needs of the most vulnerable are met” (UN 2015, paragraphs 8 and 9). Education is a key instrument for inclusion and social justice, if policy making is based on the ethos of diversity as empowerment. In this view, the variety of cultures, languages and ethnicities are powerful resources towards enabling youth to be able to find themselves reflected in their learning environment. Building this unity in diversity, where deficit discourse is alienated, requires that voices of the youth be awarded agency.

Education can pave the way for diverse multistrand narratives, where identity and language commingle to find expression in a society where ‘othering’ is mitigated through a sustained inclusive approach to education. Both heritage languages and the majority language of the society play key roles in affording voice.

The purpose of the round table session is to critically view how current policy and praxis encourage empowering of youth with diverse backgrounds to be heard and become a meaningful part of the educational environment, and thereby, bonafide members of society.

The focus is on how teacher education in the north can respond to the increasing challenges of a multilingual classroom. How does teacher education support pre-service and in-service teachers promote and facilitate L1 and second language learning for multilingual students?

Unique Session ID = 440



#### 4.5.7 Digital means for learning indi

**Convener:**

Bjørn Willy Åmo

**Co-convener:**

Therese Åmo

**Bjørn Willy Åmo<sup>1</sup>, Therese Åmo<sup>2</sup>**

<sup>1</sup>Handelshøgskolen, Nord universitet, <sup>2</sup>Språk app

Session description

Our session will discuss the need among indigenous young people to strengthen their indigenous identity by enhancing or regaining their indigenous language. Being able to speak and express oneself in a language is important for feeling included. There is a growing debate regarding how indigenous one has to be for to be accepted among the Same population as a Same. Language is one such identity marker that announces membership.

A group of young Same entrepreneurs works toward preparing an app for learning one of the Same languages. The idea is that the structures, layout and arrangements could easily be adjusted to facilitate include other languages as well. One of the team members has a BSc in programming of apps and games, another team member has a master in design as well as a bachelor in anthropology, the third team member has a master in library subjects. The team has made a poll among 450 young Same people regarding their needs for such an app.

The team would like to present findings from this poll and invite to discussions on how to pull this initiative further. The team would like to learn from other similar initiatives, link up with interest groups, and network with organizations promoting language and culture among indigenous groups in the high north.

Unique Session ID = 474

#### **4.5.8 Multifaceted approaches to strengthening the capacity of rural Indigenous and reindeer herding youth**

**Convener:**

Svein Disch Mathiesen

**Co-convener:**

Marina Tonkopeeva

**Svein Disch Mathiesen, Marina Tonkopeeva  
International Centre for Reindeer Husbandry**

Session description

Indigenous youth and reindeer herders from the rural areas are key stakeholders in shaping the future of the North in the face of climate change. Indigenous and reindeer herding youth hold a unique perspective on the challenges and opportunities presented by climate change through their deep connection to the land, ecosystems, and traditional knowledge systems. Their active involvement and empowerment are crucial for fostering climate resilience, preserving cultural heritage, and ensuring sustainable futures for their communities. This session aims to foster a dialogue on the inclusion and empowerment of Indigenous and reindeer herding youth, equipping them with the necessary skills to navigate and mitigate the impacts of climate change and become resilient agents of change. This session will bring together youth representatives, community leaders, and educators to discuss and develop strategies for enhancing the skills and capacities of Arctic youth. This session will provide an overview of the specific challenges faced by the rural Indigenous and reindeer herding youth, how they are affected by habitat disruptions, and socio-economic changes. This session will examine the importance of integrating traditional knowledge into education systems and community programs and innovative ways to strengthen the transmission of traditional knowledge among the youth, including reindeer herding knowledge, land stewardship, and Indigenous governance models. The session is a part of the global 10545 GEF-UNEP Reindeer Herding and Resilience project.

Unique Session ID = 526

#### 4.5.9 Educational innovation for the Circumpolar North

**Convener:**

Anthony Speca

**Co-conveners:**

Heather Nicol

Gary Wilson

**Anthony Speca<sup>1</sup>, Heather Nicol<sup>1</sup>, Gary Wilson<sup>2</sup>**

**<sup>1</sup>UArctic Læra Institute for Circumpolar Education / Trent University, <sup>2</sup>UArctic Læra Institute for Circumpolar Education / University of Northern British Columbia**

Session description

This session is devoted to educational innovation related to the Arctic or Circumpolar North in university, school or community contexts. We invite papers not only on traditional classroom teaching, but also online teaching and other non-traditional educational modes (e.g. educational simulations, outdoor learning, land- or community-based learning, etc).

Papers may focus on any learner group, whether children, youth or adult learners. Papers may also focus on different types of learning, such as conceptual learning, experiential learning, skills-building (e.g. communication or leadership skills) or character development (e.g. self-confidence, leadership, coping with stress, etc). We encourage papers that take an interdisciplinary approach, including the Arctic humanities, social sciences and natural sciences. We especially encourage papers in the field of Indigenous Knowledge education, or papers that aim to bridge Western and Indigenous epistemologies.

Papers may also focus on teaching and learning about the Circumpolar North in the UArctic context. This includes not only the UArctic Circumpolar Studies (CS) programme itself, but also stand-alone CS courses, minors, certificates, diplomas, degrees, etc. Faculty designing or delivering CS are invited to look critically at their practice, including curriculum development, course delivery, teaching methods, learning environments, and so on. How is CS delivered – and how could and should it be delivered – across UArctic?

Finally, we hope that this session will go some way to promoting international linkages and the sharing of best practice between educators concerned with the Arctic or Circumpolar North.

Unique Session ID = 689

## 5. Other Session topic

### 5.1 Critical Arctic research in action: security, development and cooperation

**Convener:**

Monica Tennberg

**Co-conveners:**

Rauna Kuokkanen

Sanna Kopra

Marjo Lindroth

**Monica Tennberg, Rauna Kuokkanen, Sanna Kopra, Marjo Lindroth**  
**University of Lapland**

Session description

Given the unprecedented transformation in the Arctic region, a multifaceted approach to comprehending and addressing security, development, and cooperation in the area is essential. Critically oriented Arctic research draws on a variety of perspectives, including Indigenous, gender, intersectional, socio-legal, and post-human views. This research problematizes and challenges the dominant state-centric, anthropocentric, and managerialist discourses and colonial practices in Arctic politics and governance, such as re-militarization, green colonialism, and global extractivism. Integrating these critical perspectives into contemporary scholarly and political debates fosters a more comprehensive and inclusive understanding the region and its challenges, and is crucial for achieving sustainable and equitable futures in the Arctic. We invite conceptual, methodological and empirical presentations that examine these topics, and beyond, to our session.

Unique Session ID = 649

## 5.2 Navigating Arctic governance: Perspectives from and beyond the region on a changing geopolitical landscape

**Convener:**

Emilie Canova

**Co-conveners:**

Monika Szkarłat

Richard Powell

Barbora Halašková

**Emilie Canova<sup>1</sup>, Monika Szkarłat<sup>2</sup>, Richard Powell<sup>1</sup>, Barbora Halašková<sup>3</sup>**

**<sup>1</sup>Scott Polar Research Institute, Cambridge University, <sup>2</sup>Maria Curie-Skłodowska University, <sup>3</sup>MUNI**

### Session description

Scholars and policy-makers from within and outside the Arctic are reassessing future developments in Arctic geopolitics. Russia's war against Ukraine has had spill-over effects on Arctic governance. In May 2023, the transition of the Arctic Council's (AC) chairship from Russia to Norway was a first step towards resuming circumpolar dialogue but it presents significant diplomatic challenges and questions persist. On the security side, Finland (and soon Sweden) have joined NATO. Powerful non-Arctic states, like China or Brazil, have called for new perspectives on Arctic governance. Simultaneously, the effects of climate change are ever more visible. These developments affect a multitude of Arctic (from States to Indigenous and local populations) and non-Arctic (AC Observers, BRICS, resource industries) actors, with varying power and interests. Amid this uncertainty and complexity, nuanced, critical, and creative scholarly approaches are essential.

This session aims to address critical questions surrounding the future of the Arctic's governance from various perspectives, including those of non-Arctic states and of the European Union (EU). Will the AC remain the cornerstone, and if so, does it require a change in its operational concept and principles? What role can the EU and AC Observers play? Can these diverse actors drive and co-create the reconfiguration of Arctic governance? Will scientific cooperation remain a central feature of Arctic cooperation?

We invite contributions from various disciplinary perspectives within Arctic social sciences and humanities, welcoming different analytical tools, methodologies, and theoretical frameworks to explore the multifaceted geopolitical challenges and opportunities in today's Arctic landscape at different scales.

Unique Session ID = 657

### 5.3 Knowing and Ordering the Arctic: Studying Arctic Expertise

**Convener:**

Svenja Holste

**Co-conveners:**

Trym Eiterjord

Holger Straßheim

**Svenja Holste<sup>1</sup>, Trym Eiterjord<sup>2</sup>, Holger Straßheim<sup>1</sup>**

**<sup>1</sup>Bielefeld University, <sup>2</sup>University of British Columbia**

Session description

Expertise has emerged as an important dimension of Arctic politics. States from outside the region looking to participate in Arctic governance appeal to polar research. The Arctic Council stresses expertise and scientific competence. Expertise is also a site of epistemic struggle, especially between Western-scientific and Indigenous-traditional ways of knowing. New governance mechanisms increasingly rely on communities of experts to articulate problems and inform solutions.

An ecosystem of Arctic expertise has emerged in which the two processes of knowledge-making and decision-making have become increasingly interwoven. Scientific knowledge, often construed as apolitical, may also be formative in the ways it delineates geographical and social boundaries. But despite the increasingly central role played by expertise in Arctic politics, it remains undertheorized. How do we conceptualize expertise and its place in regional politics? How do we study the (geo)politics of who gets to be considered an expert? On a more fundamental level, in what ways is knowledge-making active in shaping worldviews of the Arctic; how is research translated into policy-relevant knowledge; and how do actors involved in these practices perceive their own roles within the shifting geopolitics of the region?

The session collects a diverse range of critical perspectives ---empirical as well as theoretical--- on both the meaning and role of expertise in Arctic politics. It invites submissions from researchers working across the social and natural sciences, but also from practitioners. Comparative studies are especially welcome. The session is intended as a first step toward a special issue or edited volume on Arctic expertise.

Unique Session ID = 668

## 5.4 Ocean Food Systems in the Arctic

**Convener:**

Brooks Kaiser

**Co-convener:**

Melina Kourantidou

**Brooks Kaiser, Melina Kourantidou**  
**University of Southern Denmark**

Session description

This session aims to provide a transdisciplinary setting for discussion of ongoing research in economic, environmental, ecological, social, legal or other relevant concerns for ocean food systems in the Arctic. We are particularly interested in connecting across local, regional, and global dimensions in search of community actions, policies and investments that further sustainability and resilience in food systems across scales. The session welcomes submissions across all four thematic lines (Oceans, Climate and Environment, Sustainable Economic Developments, and People of the North) that are connected to natural resource extraction for food commodity networks, local and Indigenous food system practices and their uses in other arenas (e.g. export of specialty goods, tourism products and experiences, cultural activities and awareness, gender concerns in food systems), connectivity and transport considerations for linked markets within and outside the circumpolar Arctic or related topics. Resources of particular interest may include directly marketable aquaculture-based or wild-captured fish, invertebrate, or algal species, but also considerations of non-market species' roles in e.g. ecological food webs and continued ecological ocean food system health and productivity. Topics that seek to gain insight from aspects of ocean food systems that create special conditions for Arctic communities (e.g. strong seasonal factors, long transportation distances, small communities with internationally valuable commodities) are highly relevant.

Unique Session ID = 475

## **5.5 Technologies for Sustainable Urban Development that contribute to Circular economy and preserve cultural identity of the Arctic**

**Convener:**

Rajnish Calay

**Co-convener:**

Fasil Eregno

**Rajnish Calay, Fasil Eregno**  
**UiT**

Session description

Almost three-quarters of the population in the Arctic's region live in urban areas. Due to climate change, tourist activities, exploration for minerals resources, and advancement in technologies cities are expanding and many rural settlements are urbanized. This leads to increasing demand of energy, thus facilities like hydrogen production, wind power parks will be built to meet this demand by renewable sources. Waste and wastewater management practices have impact on environment and human health. The session will present outcome of ongoing research as oral presentations and display posters and discuss how urban development may cope with the climate crisis and its local impacts. Below are the tentative topics:

- Establishing green transport in the arctic including electric and hydrogen transport
- Recycling of waste from mining and construction industry
- Waste & Wastewater management
- Circular economy & conservation of resources
- Integrating indigenous identity in urban planning

Unique Session ID = 500



## 5.6 Interdisciplinary Arctic research using space data

Convener:

Audrey Schillings

**Audrey Schillings**  
**Umeå University**

### Session description

Our society has become more dependent on satellite data such as global navigation systems (GPS) or telecommunications. As the number of satellites orbiting Earth increases every year, their significance in our daily lives becomes more evident but also facilitates the collection of scientific data openly accessible to the scientific community. Space agencies have deployed dedicated Earth observation satellites to monitor the polar regions, namely the Arctic and Antarctic.

This session aims to promote the utilization of satellite data and perhaps inspire researchers to explore the potential of space data through interdisciplinary projects. We invite poster and oral contributions on recent advancements in the Arctic research across diverse scientific disciplines using satellite data such as (but not limited to) CryoSat, Sentinel, JPSS missions, MERIS, as well as private satellites dedicated to the investigation of the Arctic regions. While an emphasis will be placed on interdisciplinary projects, we also encourage submissions of projects interested to use space data.

Unique Session ID = 553

## 5.7 Powering the North...maybe: Opportunities and concerns around nuclear power in the Arctic

**Convener:**

Diane Hirshberg

**Co-convener:**

Kathleen Araujo

**Diane Hirshberg<sup>1</sup>, Kathleen Araujo<sup>2</sup>**

**<sup>1</sup>Institute of Social and Economic Research & UArctic, <sup>2</sup>Energy Policy Institute, Boise State University**

### Session description

As Alaska moves toward hosting the first micronuclear reactor in the US, it is critical to better understand both the possibilities and drawbacks of deploying nuclear power to address the need for low-carbon energy options in Arctic communities. In this session, we will explore topics from the technology underlying small modular reactors (SMRs) and micronuclear reactors (MNRs), including how they differ from legacy reactors and compare with other options for reliable long-lasting energy sources in the North to the possibilities for and challenges around building SMRs and MNRs in remote Arctic locations including issues in integrating them into existing energy grids. We also will tackle security and environmental concerns; and share innovative ways to build community capacity for monitoring environmental contaminants associated with nuclear and other energy options. In particular, we plan highlight methods for ensuring that communities drive the decisions around adopting these technologies and share strategies for community-centered long-term planning and decision-making around energy deployment. We hope others engaged in similar work will submit papers that complement or challenge the work we will be sharing. We also will foreground the voices of Arctic residents and leaders in this session, inviting both an Arctic youth leader and an Arctic Mayor to respond to the panel presentations and to present their thoughts both on SMRs/MNRs and more broadly on the best path toward a stable low-carbon energy future in the North.

Unique Session ID = 433

## **5.8 Building & Sustaining Strategic Linkages for Network-to-Network Arctic Research Collaboration**

**Convener:**

Brit Myers

**Co-conveners:**

Diane Hirshberg

Sheila Downer

Liz Weinberg

**Brit Myers<sup>1</sup>, Diane Hirshberg<sup>2</sup>, Sheila Downer<sup>3</sup>, Liz Weinberg<sup>4</sup>**

**<sup>1</sup>Arctic Research Consortium of the U.S. (ARCUS), <sup>2</sup>University of the Arctic (UArctic) & University of Alaska Anchorage, <sup>3</sup>Memorial University of Newfoundland, <sup>4</sup>Interagency Arctic Research Policy Committee (IARPC)**

### Session description

Arctic research has a long tradition of being undertaken through collaborations that span disciplines, knowledge systems, institutions, and nationalities. However, the international Arctic research community of today is rapidly growing in size, complexity, and diversity. This evolution has both increased the need for establishing new strategic linkages to address wider community challenges while simultaneously intensifying the difficulties associated with bringing together the expanding number of people and programs involved in Arctic research.

In this session, we invite presentations from individuals and institutions involved with large Arctic research networks to highlight the collective work of these communities, explore network-to-network linkages, and to identify and discuss mechanisms to enable and sustain cross-network Arctic research coordination, exchange, and innovation.

As both national and international planning processes move forward to identify and address Arctic research priorities and needs, this session also invites presenters to consider what changes to current cross-network engagement processes or new types of partnerships might be useful in promoting wider Arctic research participation and inclusivity.

Unique Session ID = 442

## 5.9 Smart Cities and Societies for Arctic Sustainable Futures

**Convener:**

Evgenii Aleksandrov

**Co-convener:**

Nadezda Nazarova

**Evgenii Aleksandrov, Nadezda Nazarova  
Nord University Business School**

Session description

There is a growing discussion regarding the “smart concept” and its potential to address Arctic or High North issues such as climate change and social challenges. Being highly innovative, smart concept has the potential to contribute to sustainable development by means of modern technologies and social innovations. While holistic smart initiatives are still uncommon, there is a growing interest in integrating them with circular economy and sustainability agendas in the Arctic. Smart transportation, smart governance, smart waste, and smart education crowd the top of the climate action lists of national and regional governments, but they also raise significant concerns.

In this regard, as part of SmartNorth UArctic Network, this session welcomes submissions of abstracts on the following topics:

- opportunities and challenges associated with implementing the smart initiatives in the Arctic from various perspectives, including governance, business, public administration, politics, geography, urban studies and social science;
- examining the potentially competing dimensions of technological development, sustainability, and the interests of Indigenous Peoples;
- exploring the integrated and overarching power of the smart society concept, which embraces multiple perspectives;
- discussion of incorporating local values and sustainability in planning and implementing Smart technologies;
- role of metrics, monitoring and assessment tools, and scenario building for smart and sustainable Arctic;
- connectivity, digital competence and skills in the development of smart and sustainable cities and communities;
- role of dialogue and partnerships in smart and sustainable cities and communities.

Unique Session ID = 443

## 5.10 Beyond Arctic Horizons: Building & Sustaining Support for the U.S. Arctic Social Science Community

**Convener:**

Brit Myers

**Co-conveners:**

Julie Raymond-Yakoubian  
Heather Sauyaq Jean Gordon

**Brit Myers<sup>1</sup>, Julie Raymond-Yakoubian<sup>2</sup>, Heather Sauyaq Jean Gordon<sup>3</sup>**

**<sup>1</sup>Arctic Research Consortium of the U.S. (ARCUS), <sup>2</sup>Kawerak, Inc., <sup>3</sup>Child Trends**

### Session description

In 2018, a report was released on a series of five workshops held across the United States to discuss the future of Arctic social science research. The planning process, known as the Arctic Horizons project, was supported by the U.S. National Science Foundation's Arctic Social Sciences Program and brought together members of the U.S. Arctic social science and Indigenous communities to reassess the goals, potentials, and needs of these diverse communities within the context of a rapidly changing circumpolar North.

In the years that have followed the report's release, however, both the global pandemic and war in Ukraine have caused disruptions within the international Arctic research community. Additionally, few national convenings specifically focused on U.S. interdisciplinary Arctic social sciences have occurred. As a result, the international ICASS XI/Arctic Congress 2024 represents an important opportunity to bring together members of the U.S.-focused Arctic social science community.

This session invites presentations from U.S. social scientists, as well as international researchers working in the U.S. Arctic, as a way to connect individuals and projects working in this region, explore how the needs of the U.S. Arctic social science community may have changed since the Arctic Horizons report release, and to discuss new avenues for building and sustaining support for the U.S. Arctic social science community in the coming years.

Unique Session ID = 492

## 5.11 Transport infrastructure and population in the Arctic

**Convener:**

Timothy Heleniak

**Timothy Heleniak**  
**Nordregio**

### Session description

This session calls for papers examining the linkages between transport infrastructure and population change in the Arctic. Transport infrastructure includes roads, railroads, airports, and ports. The session is part of the project InfraNorth (Building Arctic Futures: Transport Infrastructures and Sustainable Northern Communities). The key question in the project is What is the role of transport infrastructures in sustaining northern communities? This session invites papers which investigate the impact of existing or planned transport infrastructure on population change across the Arctic. A railroad can lead to significant population increase to a settlement or spell the demise if it is not routed to a town. Roads can provide valuable linkages which allow populations to continue to grow or improve the population structure such as retaining young people. An example of this is the extensive road and tunnel network in the Faroe Islands. Airports also play a role in providing access for outsiders to Arctic settlements and boost population whereas they might have otherwise declined. Air travel was crucial to the expansion of population across the Arctic in the early twentieth century. Ports have been important for fishing and shipping and have been the locus of population growth and concentration in many places in the Arctic. Both theoretical and practical papers based on case studies of specific infrastructure projects are welcome.

Unique Session ID = 497

## **5.12 Cross/Trans-Disciplinary Collaborations and Advancing Community, Equity, and Inclusion in Arctic Research**

**Convener:**

USAPECS

**Co-convener(s):**

APECS Norway APECS Norway

**USAPECS USAPECS<sup>1</sup>, APECS Norway APECS Norway<sup>2</sup>**

**<sup>1</sup>USAPECS, <sup>2</sup>APECS Norway**

Session description

Arctic research brings together a diverse mix of disciplines, scholarships, and perspectives, yet there continues to be a struggle to adequately create meaningful collaborations and fully represent a diversity of Peoples, for both historical and contemporary reasons. Research incorporating this diversity is imperative to address the rapid social, environmental, economic, and geopolitical changes unfolding across the region and to create a more accessible, safe, and inclusive research community; necessary for building research networks and work environments where people feel safe, valued, and productive. This session aims to highlight the growing number of cross-disciplinary and transdisciplinary projects underway across the Arctic as well as the advances being made to encourage diversity, equity, inclusion, and accessibility in such research. Focusing on the work of early career and established researchers, Indigenous scholars, community members, and others this session highlights completed and ongoing research efforts that transcend disciplinary lines and strive to create a more accessible, safe, and inclusive research community. In particular, we invite abstracts that discuss both the challenges and opportunities presented by such research efforts as well as lessons learned through collaboration.

Unique Session ID = 538

### **5.13 Indigenous Teacher Education connecting and collaborating for the sustain futures**

**Convener:**

Pigga Keskitalo

**Co-convener:**

Ylva Jannok Nutti

**Pigga Keskitalo<sup>1</sup>, Ylva Jannok Nutti<sup>2</sup>**  
**<sup>1</sup>University of Lapland, <sup>2</sup>Sámi allaskuvla**

#### Session description

This session concentrates on themes of Indigenous Teacher Education. We encourage papers that are involved in various working groups of stakeholders working with Indigenous communities to join us and share their knowledge. For example efforts being made to decolonise curriculum and pedagogy, develop a critical Indigenous consciousness that engages justice-centered pedagogies, or critical Indigenous curriculum that advances the objective of teaching using Indigenous philosophies, land and languages are welcomed. Indigenous education has been actively developed over the past few decades, with a focus on finding methods to conduct Indigenous teaching in formal institutional settings reversing a long history of schooling that has resulted at least partly in the loss of identities of students as well as their connection to their culture and the land. Indigenous education, on the other hand, is founded on the nature and quality of communication at all levels of being. In indigenous education, the art of teaching is accomplished through language, links to the social and socio-ecological surroundings, art, play, and ritual. Including Indigenous themes for mainstream schooling has advantages as well. The emphasis of this session will be on experiences as well as transformations in Indigenous teacher education.

This session will provide practitioners' and researchers' information on various indigenous education programs offered both globally and in the circumpolar north. We invite speakers to join this session and submit papers with a title and short abstract (150 words) for Professor Pigga Keskitalo: [pigga.keskitalo@ulapland.fi](mailto:pigga.keskitalo@ulapland.fi)

Unique Session ID = 554



## 5.14 Strategies from Indigenous-led and collaborative projects for knowledge sharing and data sovereignty in Arctic research

**Convener:**

Noor Johnson

**Co-convener:**

Tatiana Degai

**Noor Johnson<sup>1</sup>, Tatiana Degai<sup>2</sup>**

**<sup>1</sup>University of Colorado Boulder, <sup>2</sup>University of Victoria**

### Session description

Across the Arctic, Indigenous communities and organizations are leading research projects that document knowledge and observations supporting a wide range of community priorities, including chronicling cultural heritage and language revitalization and community-based observing of environmental change. These projects utilize diverse strategies, tools, and technologies to collect, manage, store and share knowledge and information to support decision-making and youth engagement. In this session, we invite projects or community-engaged researchers to share their strategies for documenting, preserving, and sharing knowledge so that it can be useful to communities, researchers, educators, planners, and policy makers. The session will include experiences from the ELOKA network (Exchange for Local Observations and Knowledge of the Arctic, [eloka-arctic.org](http://eloka-arctic.org)) to support the collection, preservation, exchange, and use of local observations and knowledge of the Arctic while respecting Indigenous data sovereignty.

Unique Session ID = 561

## 5.15 Arctic Futures: Local Visions and Global Projections

**Convener:**

Peter Schweitzer

**Co-convener:**

Olga Povoroznyuk

**Peter Schweitzer, Olga Povoroznyuk**  
**University of Vienna**

Session description

The Arctic does not only have a long history of boom-and-bust-cycles, often based on resource extraction, but also is a region associated with the promises of growth and prosperity. As the Arctic has become an arena for industrial and infrastructural development, militarization, and the impacts of climate change processes, the imagined futures of this vast region have become an important topic of conversation and research.

Future imaginaries of the Arctic that are driven by global economic interests, geopolitical constellations and international mega-project engineering often fail to represent local and Indigenous voices, needs and concerns. Only in recent years, Arctic communities and residents have become more engaged – and partially more empowered – to participate in planning and decision-making about the future(s) of their home areas. However, a lot needs to be done to achieve fair and equitable involvement of local communities in research and policy activities about their futures.

This session invites a variety of perspectives and approaches to the topic, ranging from historical treatments of “Arctic futurology” to ethnographic futures research, from experiences with scenario building and visioning exercises to participatory planning. The session calls for theoretical and methodological contributions – and applied case studies – from the social sciences, arts and humanities, as well as from Arctic residents, knowledge holders, practitioners and planners.

Unique Session ID = 641

## 5.16 Assessing Human Development, Quality-of-Life/Happiness and Sustainable Development in the Arctic

Convener:

Birger Poppel

**Birger Poppel**

**Ilinniarfissuaq/Institute of Learning - Iisimatusarfik/University of Greenland**

### Session description

Since the beginning of the 21<sup>st</sup> century several analyses focusing on different aspects of human development – including livelihoods, living conditions, well-being/quality of life/happiness – among Arctic indigenous peoples and other Arctic residents have been conducted in partnerships between indigenous as well as non-indigenous researchers and experts.

Research efforts such as SLiCA, AHDR, ASI, and ECONOR), to mention a few of the Circumpolar projects, apply different approaches and methodologies. Despite these differences, the projects share the ambition to document and compare the socio-economic and socio-cultural developments in the circumpolar Arctic, not least in a sustainable development context.

An increased number of local, regional and national analyses documenting impacts of changes due to e.g., climate change, renewable and nonrenewable resource exploitation, environmental and other changes have also been conducted and more recently other projects such as the circumpolar partnership, Wealth of the Arctic Group of Experts (WAGE) focusing on inequalities in the Arctic have been developed.

Parallel to the development of a diverse group of indicators to assess and compare different aspects of Arctic human development, indicators have been developed by the United Nations to evaluate how the member states meet the goals of the 2030 Agenda for Sustainable Development (SDG) and indicators to measure Quality-of-Life/Happiness have been developed in the UN and Organizations such as the OECD.

The ambition of the session is to learn from projects developing social indicators in the Arctic and projects applying indicators such as the UN SDG and e.g., OECD's Happiness indicators in the Arctic.

Unique Session ID = 643

## 5.17 Online disinformation and the Arctic region

**Convener:**

Mathieu Landriault

**Co-convener:**

Henri Wallen

**Mathieu Landriault<sup>1</sup>, Henri Wallen<sup>2</sup>**

**<sup>1</sup>École nationale d'administration publique, <sup>2</sup>University of Lapland**

Session description

Studying how disinformation about the Arctic region takes place runs into several challenges. For one, many different languages are at play when referring to the 8 Arctic states: a multi-lingual effort is imperative to compare the intensity and nature of Arctic disinformation. Secondly, online disinformation is active on multiple platforms (Twitter, Facebook, Reddit, etc.), complicating the analysis and multiplying the possible sites of empirical investigation.

This session seeks to gather researchers studying Arctic online disinformation in different languages and on different online platforms. The objective is to share insights in order to develop a comparative perspective as to how the Arctic region falls victim of disinformation, the strategies deployed by users to spread false information and the issues that are at the center of Arctic disinformation.

Unique Session ID = 435

## 5.18 The powers of maps in shaping human-nature relations in the Arctic

**Convener:**

Helena Gonzales Lindberg

**Co-convener:**

Camilla Risvoll

**Helena Gonzales Lindberg, Camilla Risvoll**  
**Nordland Research Institute / Nordlandsforskning**

Session description

Maps do not merely represent places and spaces but also produce clear separations between the 'human world'; country borders, roads, and dotted cities, and the 'natural world'; forests, tundra, and glaciers. In their inclusions and exclusions maps cement specific human-nature relations and in so doing constitute a sense of hierarchy, certainty, and control, often naturalising political economic relations to nature. Moreover, maps perform different roles in political processes: as authoritative documents, points of departure, or proposals for the future. This can make maps highly influential. Yet, these powers of maps are rarely problematised in the study and practice of environmental politics or indeed in people's everyday lives. We will discuss how maps shape human-nature relations upon which political choices are made, concentrating on examples from the Arctic region. Topics discussed will include:

- How maps perform the political and their influence on environmental governance in the Arctic.
- How maps are employed as arguments or proposals for how to deal with sustainability challenges in the Arctic.
- How maps can be made or used to rethink taken-for-granted understandings about the Arctic.

Panelists will shortly present their paper drafts, which are circulated prior to the event. To focus on how maps frame our thinking of and in the Arctic means to recognise the complex relations between humans and nature, highlighting the role of non-state actors, marginalised knowledges, and anti-colonial perspectives. Thus, we welcome discussions on maps that are based on various knowledges and expression forms, including indigenous knowledges and art.

Unique Session ID = 476

## 5.20 Hubs and Networks in the Arctic: Connecting Locally, Cooperating Globally

### Convener:

Embla Eir Oddsdóttir

### Co-conveners:

Jula Maegaard-hoffmann  
Patti Bruns

**Embla Eir Oddsdóttir<sup>1</sup>, Jula Maegaard-hoffmann<sup>2</sup>, Patti Bruns<sup>3</sup>**

**<sup>1</sup>Icelandic Arctic Cooperation Network, <sup>2</sup>Arctic Hub, <sup>3</sup>Arctic Mayors' Forum**

### Session description

Networks and hubs are essential for promoting cooperation in the Arctic – and their ability to operate both locally and globally makes them a powerful tool for building sustainable partnerships across borders. Whether through knowledge sharing, dialogue facilitation, or collaborative initiatives, these networks and hubs play a critical role in promoting cooperation, fostering innovation, and driving positive change for a sustainable Arctic and beyond.

This session/round-table discussion will explore the value of hubs and networks in bridging the gap between local and international perspectives and highlight the importance of including local voices. Potentials for concrete cooperation, including project(s) development and applications will also be explored.

The session conveners invite experienced professionals, networks and hubs representatives, and interested parties to explore the potential of connecting with other networks and hubs to share their insights and experiences. Innovative and concrete project ideas on how to advance Arctic cooperation through connecting Networks and hubs are also welcome.

Through connecting, we believe we can advance collective efforts to address the region's challenges. Join us and engage with some of the key players driving Arctic hubs and networks and take part in painting a vivid picture of what the future holds!

Unique Session ID = 625

## 5.22 The Role of Education for Environmental Sustainability and Sustainable Development in Northern Communities

**Convener:**

Diane Hirshberg

**Co-convener:**

Kirk Anderson

**Diane Hirshberg<sup>1</sup>, Kirk Anderson<sup>2</sup>**

**<sup>1</sup>Institute of Social and Economic Research & UArctic, <sup>2</sup>Memorial University**

### Session description

Too often, education is not included in the interdisciplinary mix for studying sustainable development or contributing to environmental sustainability in the Arctic. Rather, it is seen primarily as a means for disseminating to K-12 and postsecondary students the concepts and research findings of academics studying the Arctic. Moreover, the ways in which education and knowledge transfer are defined and discussed tend to be very narrow.

It is vital that policymakers, researchers, and educators alike think about human capital and knowledge sharing— you can't have a vibrant economy without an educated workforce, and you can't move toward sustainability in communities without the skills and understanding needed to reach it. And yet far too often education is left out of the discussion of sustainable development in Arctic research circles.

In this session, we invite papers and presentations that explore how education and knowledge sharing, whether within school buildings, among family and community members in homes and public spaces, or out on the land, contribute to enabling community members and students to create a sustainable future for themselves and the generations to follow. We are particularly interested in hearing from researchers and community members engaged in work that addresses the challenges and opportunities in northern and remote communities, and from northern community leaders and youth engaged in these efforts.

Unique Session ID = 456