

“School of Arctic Dialogue”



Intelligence

In Rovaniemi, Kiruna, Tromsø, Kautokeino, Hetta, Inari / Ivalo, and Sodankylä

June 8–14, 2026

TN on Geopolitics and Security (UArctic)

<https://arcticpolitics.com>

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About the Idea of the Calotte Academy

The Calotte Academy is an annual traveling symposium and international forum in Europe's North Calotte region, designed to promote interdisciplinary discourse and implement the interplay between senior and young researchers to train and supervise early-career scientists in circumpolar Arctic studies. It is a "school of dialogue" and participatory by nature with an idea to share knowledge and experiences with communities and foster academic and policy-oriented dialogue among members of the research community and a wide range of other northern stakeholders. It is also an interdisciplinary brainstorming meeting to bring researchers and other experts from different fields, regions and countries together to discover and implement new methods and applications.

The Calotte Academy is for established researchers and early-career scientists (ECS), particularly PhD candidates and post-docs, with different academic and/or knowledge backgrounds to participate and present their work in the 2026 Calotte Academy.

Procedures of the Calotte Academy

The Calotte Academy is structured so that there are academic sessions with scientific presentations and brainstorming discussions in each location, as well as a public session, based on invitations, in one or two of the locations. Since dialogue and application of science are the most important goals of the Calotte Academy, it is recommended to remember and apply the open-ended nature of dialogue and how to cross disciplines, sectors and other borders. A fundamental precondition for this is to have enough time for questions, comments and open discussion as well as enough patience for listening to others' argumentation.

Following from these principles, the sessions will be structured in such a way that each **presentation** will be allocated altogether 30–40 minutes out of which a **maximum of 15 minutes** will be reserved for the presentation and the rest for questions, comments, and open discussion.

The 2026 Academy is also an interdisciplinary brainstorming meeting for scholars and other experts from different fields and disciplines all over the circumpolar North to discover new methods and plan possible research project(s), as well as to know more about the aims and activities of the TN on Geopolitics and Security. In addition to academic sessions, there will be a devoted session for research plan/project design, fund-raising and other more practical issues of research; and second, a role-play game (simulation of international negotiation) on a state of Arctic governance and geopolitics, where each participant has their role.

Afterwards, a Final Report including the abstracts, main findings, highlights, and ideas for potential research questions and projects of the 2026 Academy's sessions will be produced (see Final Reports on previous Calotte Academies at the following address: <https://calotte-academy.com/final-reports>). The Report will be based on notes and reports on sessions written by rapporteurs chosen for each session during the Calotte Academy tour.

Calotte Academy's Two Methods

Embodiment and dialogue are the two core methods of the Calotte Academy. They are combined by the dualism of 'mobility', when traveling in several destinations, and having excursions locally, in the European Arctic and Sápmi, and a dialogue, when implementing an open discussion after each participant's presentation. This twofold approach is participatory by nature, and inspired by the principles of inclusivity, and freedom of expression.

Firstly, the 'mobility by nature' idea leans on confidence on personal sensory experiences of the realities (of a region, its peoples and societies) as a learning principle. People are embodied beings, and therefore seeing, hearing, smelling, tasting and sensing, in any way, enhance and localize thought and learning (e.g. Varela et al. 1993), as well as assisting to gain a sense of the reality of a region / community (e.g. Heininen 2023).

As a result, the participants overcome not only state boundaries and those between different areas (e.g. reindeer herding, mining, military), but also non-territorial borders / boundaries erected between disciplines (e.g. Östreng 2010), livelihoods, seasons, or mental maps (e.g., tourism, car & tire testing).

Secondly, while substance is most important, in practical terms structure and methods matter. Hence, an annual Calotte Academy is organized and structured in a way that ensures an open discussion that aims a real dialogue in which the participants "approach the dialogue with an open mind... [and realize] the potential of dialogues" (Gadamer 1992). Accordingly, dialogue is built on participatory approach and a sense of community, as well as a faith that, when gathering knowledgeable people are open-minded to listen and think, talk and share ideas, as well as rethink and build upon others' arguments.

As a result, a dialogue with an open-ended nature is achievable when "committed to inclusivity, ... engaged with each other's arguments, ... focused on issue domain, ... embraced the open-ended nature of the dialogue", as a cumulative process (Kornprobst 2009). This is implemented by structuring the sessions in such a way that the presentation of each participant (maximum 15 minutes), based on their research and expertise, will be followed by a lively discussion (including questions, comments, answers) twice of the time allocated for a presentation. This is a fundamental precondition to have "the potential of dialogues" being materialized.

Finally, all this is particularly important in turbulent times of world politics (of disorder) with great power rivalry, increased tension, lack of tolerance, and when facing the climate crisis. Whereas the traditional scientific world much leans on disciplinary and class-room methods in research, teaching and when reviewing grant applications, this kind of unorthodox, interdisciplinary method with a flexible format is increasingly favored and supported by, as well as supportive for, early-career researchers and young policymakers. Unsurprisingly, this approach has also potential to bring unexpected perspectives and results.

About the 2026 Calotte Academy

The 2026 Academy, with the theme "Intelligence", is taking place from 8 to 14 June 2026 in the European Arctic, including sessions in Rovaniemi, Kiruna, Tromsø, Enontekiö, Kautokeino, Inari, and Sodankylä—through Sápmi, the northernmost parts of Finland, Norway, and Sweden. The theme "Intelligence" is inspired from the recent resurgence of the term in particular in the context of the rise of artificial intelligence (AI) or within debates on military intelligence amid increasing geopolitical

tension. Yet, the term intelligence is associated with numerous meanings including information or knowledge, cognitive ability, military or espionage, computational intelligence and machine learning, or that of agencies that gather or process secret information. Furthermore, different fields of intelligence may intersect such as the use of AI in data processing within military intelligence.

The theme is also inspired by the observation that global multi-crises are not only geopolitical and ecological, but also crises of intelligence: crises of information, decision-making, sense-making, and knowledge production. The tension between militarization and environmentalization is also a tension between competing epistemologies—strategic intelligence, scientific intelligence, Indigenous knowledge, algorithmic prediction, and human cognitive limits. Similarly, the promise of increasing efficiency through AI to reduce human resource consumption for a more sustainable future led to the paradox of a de-facto constantly growing energy demand to power the world's data centers, underlining the complex relationships between different fields or understandings of intelligence.

This year's theme is intentionally broad, inviting contributions from a wide range of disciplines and approaches. The multiple meanings of the term as well as their complex relationships and potentially contradictory effects make it a particularly rich concept for interdisciplinary exploration in and about the Arctic. We therefore invite researchers, students, and young policymakers working on/from the Arctic in fields as varied as International Relations, International Law, Education, Political/Social Sciences, Psychology, Neuroscience, Philosophy, History, Geography, Anthropology, Indigenous Studies, Media Studies, Linguistics, Environmental Humanities, and Data Science.

In an era where information is the lifeblood of governance, science, warfare, and society, what does intelligence mean? How does it shift in times of global disorder, climate urgency, and the development of AI? At the same time, conceptions of intelligence are being transformed - expanded by posthumanist, decolonial, Indigenous, cognitive, and technological perspectives. What forms of knowledge and intelligence are recognized, devalued, weaponized, automated, or extracted in the Arctic and beyond? These are the kinds of questions the Calotte Academy 2026 aims to explore.

Co-organizers & Contacts

The Calotte Academy 2026 is co-organized by the UArctic TN on Geopolitics and Security and the Northern Policy Society (Finland), in cooperation with (in alphabetic order) Arctic Portal (Iceland); the Department of Media Studies at Stockholm University; the ETS Institute at Luleå Technical University (Sweden); the Faculty of Law at the University of Lapland (Finland); the International Center for Reindeer Herding Husbandry (EALÁT) (Norway); Trent University (Ontario, Canada); and the VERA Centre of Russian and Border Studies at the University of Eastern Finland (Finland).

For more information, feel free to contact Prof. Lassi Heininen (lassi.heininen@arcticpolitics.com), Prof. Laura Junka-Aikio (laura.junka-aikio@ulapland.fi), and the Calotte Academy's coordinators, PhD Candidate Tom Gabriel Royer (troyer@ulapland.fi) and PhD Candidate Zhanna Anshukova (zanshuko@ulapland.fi) at University of Lapland, Eleni Kavvatha (eleni.kavvatha@uclouvain.be) at UCLouvain Saint-Louis Brussels, and M.A. Tatiana Anderson (tatiana.petrova.lpf@gmail.com) of the Northern Policy Society.

PROGRAM

Calotte Academy 2026

8–14 June 2026

Rovaniemi – Kiruna – Tromsø – Kautokeino – Hetta – Inari / Ivalo – Sodankylä

Polarsteps: <https://tinyurl.com/ca2026map>

Sunday, 7 June in Rovaniemi

18.00–22.00 *Come together & welcoming at DAS Kirstinkoto Clubroom (address: Ylikorvantie 21 b, 96300 Rovaniemi)*

Monday, 8 June in Rovaniemi

08.30–08.45 *Pick-up from Guesthouse Borealis at 08:30 (address: Asemieskatu 1, 96100 Rovaniemi) and Rovaniemi Bus Station at 08:45 (address: Lapinkävijäntie 2, 96100 Rovaniemi) to the University Campus.*

1st Opening Session: “Embodiment & Dialogue – The two Methods of Calotte Academy”

09.00–10.00 University of Lapland’s Campus, room A140

- Matti Nojonen, “The closing of the academic mind: Populism, securitization, and the erosion of university autonomy in Western democracies”
- Lassi Heininen, “Calotte Academy – Don’t copy the subordination to (geo)politics, apply the origin of Academia!”

(Rapporteurs: Eleni Kavvatha and Jennifer Rhemann)

The 2026 Calotte Academy opened at the University of Lapland with a welcome by Lassi Heininen, who introduced the Academy’s two core methods, embodiment and dialogue and emphasized that all destinations along the journey were located within the Sápmi region. He framed dialogue not as a “battlefield,” but as a way of gradually building layers of discussion, understanding and engagement, setting the tone for the discussions that followed. The opening session then focused on academic freedom, dialogue, and the growing influence of geopolitics and securitization on universities and research. Matti Nojonen discussed the “closing of the academic mind,” arguing that universities across Western democracies are increasingly affected by political pressures, funding priorities, populism, and national-security agendas. Participants reflected on emerging forms of self-censorship, where researchers become increasingly conscious of which topics, concepts, or positions are considered acceptable or fundable. The discussion emphasized that these changes often occur gradually, through apparently reasonable individual decisions, but can cumulatively undermine university autonomy, freedom of inquiry, and ultimately democratic legitimacy.

Lassi Heininen connected these developments directly to the Calotte Academy's long-standing commitment to open dialogue and academic freedom. Drawing on the history of Arctic cooperation, he recalled how dialogue across geopolitical divisions during the latter Cold War helped create practical cooperation, including the Arctic Environmental Protection Strategy (AEPS) adopted in Rovaniemi in 1991. Rather than treating disagreement as a battlefield, the Calotte Academy approach understands dialogue as a process of building layers of discussion: reciprocity, respect and even simply "agreeing to disagree" can provide a basis from which cooperation becomes possible.

The wider discussion brought examples from Finland, Sweden and beyond, highlighting how NATO enlargement, national-security discourse, changes in university funding and workloads, and political polarization are reshaping the conditions under which academics work. Participants also raised concerns about the marginalization of critical voices, manipulation of public language, and the replacement of terms such as "war" with more politically convenient terminology. A recurring concern was who gets to define the "national interest" or national security, particularly when security elites themselves are not democratically accountable.

The session therefore established an important theme for the Academy: academic freedom and genuine dialogue are not abstract academic principles but necessary conditions for producing knowledge, addressing climate and environmental challenges, and maintaining democratic societies. In this sense, the Calotte Academy's methods of embodiment and dialogue offer an alternative to the subordination of academic inquiry to geopolitical divisions: engaging directly with places and communities across Sápmi while keeping spaces open for disagreement, critical questioning and multiple perspectives.

2nd Session: "Narratives, Information & Media"

10.15–12.30 University of Lapland's Campus, room A140

- Olaf Hajnosz, "Arctic narratives in global media from 2016 to 2026"
- Bipandeep Sharma, "'Scientific information': Is it losing sight in Arctic geopolitics?"
- Urban Wråkberg, "Interdisciplinary perspectives on regional and global Arctic intelligence"
- Jennifer Rea Fraser, "'Touch Grass' – experience, information and youth narratives in soft climate denial"

(Rapporteurs : Rehan Tahir Sabbih, Maide Cebi)

The session explored the relationship between narratives, information, media, scientific knowledge, and intelligence in shaping Arctic governance and public understanding. Through four presentations, participants examined how Arctic issues are represented in media, how scientific information interacts with geopolitics, how propaganda and information environments influence perceptions, and how digital platforms shape contemporary understandings of climate change and environmental issues.

Olaf Hajnosz examined Arctic narratives in media between 2016 and 2026 through a quantitative analysis of 439 articles. The presentation demonstrated growing media attention toward the Arctic, particularly in relation to climate change and geopolitics. Discussion focused on the limited representation of Arctic communities in media narratives, the distinction between information and

narratives, and the extent to which selected media outlets could be considered representative of global coverage.

Bipandeep Sharma explored whether scientific information is losing prominence within Arctic geopolitics. Through case studies on climate change, Russia's nuclear legacy, Arctic pathogens, and black carbon emissions, the presentation highlighted tensions between scientific cooperation and geopolitical competition. Participants emphasized the importance of maintaining international scientific collaboration and questioned why scientific evidence is often sidelined despite its relevance for policymaking.

Urban Wråkberg examined Arctic intelligence through the lens of Russia–West relations, cross-border cooperation, and information exchange. Discussion focused on propaganda, academic boycotts, intellectual sanctions, and the challenges of sustaining dialogue during periods of geopolitical tension. Participants reflected on the difficulties of distinguishing propaganda from competing interpretations of reality and the implications of deteriorating academic cooperation.

Jennifer Rea Fraser addressed the influence of social media, algorithms, and digital information environments on youth perceptions of climate change. The presentation introduced the concept of the experiential gap, arguing that many environmental issues are increasingly encountered through digital platforms rather than direct experience. Discussion highlighted concerns regarding information overload, doomscrolling, declining trust in institutions, and the role of social media in shaping public understanding.

Several themes connected the four presentations. Participants repeatedly emphasized the distinction between information and narratives, the growing influence of algorithm-driven information environments, the importance of scientific integrity, and the challenges posed by

propaganda, misinformation, and geopolitical polarization. The discussions also highlighted the value of dialogue, academic exchange, and experiential learning as mechanisms for strengthening understanding across political and disciplinary boundaries.

Overall, the session demonstrated that intelligence in the Arctic extends beyond traditional security concerns and includes the production, communication, interpretation, and application of knowledge. Participants concluded that addressing contemporary Arctic challenges requires not only access to information, but also critical engagement with narratives, sustained scientific cooperation, and meaningful dialogue among diverse actors and knowledge systems.

12.30–14.00 Lunch break at Cafeteria Petronella (University of Lapland's Campus, Wing F)

1st Round of the Role Play Game:

14.00–15.45 University of Lapland's Campus, room C154

16.00–17.30 City visit at the downtown of Rovaniemi

17.30–21.30 Driving from Rovaniemi to Kiruna

22:00–23:00 Optional hike to the Kiruna hill

Tuesday, 9 June in Kiruna

3rd Session (online): “Arctic Networks & Hubs for Intelligence”

09.00–11.30 Kiruna Folkhögskola

- Evgeny Zarov, “Mukhrino field station as an extra-geographical intelligence hub: Why West-Siberian peatlands are indispensable for global climate monitoring”
- João Bettencourt, “Sensing or seizing? Arctic observation, environmental intelligence and the scramble for influence”
- Yulia Zaika, “Shaping Arctic intelligence competences through expert and knowledge continuity and legacy at the edges of geopolitical transformations: FORAS project experience”
- Heather Nicol, “Circumpolar education and the challenges of new (geo)political paradigms”

(Rapporteurs : Amanda Graham and Sara Leandra Loosli)

The first two sessions of our travelling symposium kept the knowledge-holder in view — the scholar, the narrator, the citizen. Session 3, held in an airy room in the Folkhögskola in Kiruna where we’d spent the night, took the next step, broadening the landscape to ask how knowledge connects and is connected through networks and hubs, and how we make sense of information and data in aggregate. Four speakers, joining an in-person room in Kiruna partly by video link from the Kola Peninsula and western Siberia, examined who produces knowledge about the North, who controls its flow, and what happens to both when their infrastructures are put under geopolitical strain.

Evgeni Zarov (Yugra State University) opened from the field, describing the Mukhrino Field Station in West Siberia as an “extra-geographical intelligence hub”: a site whose long-term monitoring of the region’s vast peatlands — some 40% of global peat deposits, and a major carbon reservoir — makes it indispensable to global climate models regardless of its political isolation. His argument was blunt: excluding Siberian data amplifies scientific uncertainty, which has consequences. Discussion turned to how sanctions and severed institutional ties have degraded international collaboration, though Zarov insisted that person-to-person contact persists where formal channels have not. AI came up too, though the connection faltered here: Zarov described it as a national resource, and the station is hoping to be allocated computing capacity to analyze the years of monitoring data that has accumulated.

João Bettencourt (Stockholm Environment Institute) reframed the session’s title as a question - “sensing or seizing?” - pointing out that Arctic observation systems (satellites, sensor networks, Indigenous and community-based monitoring alike) are never politically neutral: coverage determines visibility, standards determine authority, and data-sharing is selective by design. His claim that “who observes the Arctic shapes who governs it” drew the session’s sharpest exchange, particularly on whether Indigenous observing networks such as ELOKA and SIZONet genuinely share in that governance or remain data sources for others’ authority. AI, he suggested, is intensifying older dual-use anxieties by making previously inert datasets newly exploitable - a concern echoed in questions about contested undersea cable infrastructure and the shift from person-to-person science diplomacy toward openly accessible, algorithmically mineable data.

Yulia Zaika (Kola Science Centre) presented FORAS, a UNESCO-endorsed initiative extending Arctic science dialogue to non-Arctic partners across the CIS, BRICS, and SCO, and now expanding into early-career education through the FORAS2E program. While the previous talks worried about data control, Zaika's case study raised the issue of institutional precarity. FORAS operates without dedicated funding, a condition she framed as double-edged: freedom from outside influence, but without capacity to scale. The recurring point, echoed from the floor by Academy convenor Lassi Heininen, was that "institutions are nothing without us" — that continuity of Arctic science depends less on organizational architecture than on individuals willing to sustain it across broken formal ties. Heather Nicol (Trent University) closed by historicizing the paradigms underneath the three preceding talks, tracing geopolitical models from Mackinder through Agnew to the present "technosurveillance" era, in which sovereignty is increasingly defined by the capacity to observe and control rather than to occupy. She argued Circumpolar education itself is being reshaped by these paradigms — through gatekeeping, funding priorities, and curricula that risk a subtler "recolonizing" even as Indigenous engagement is nominally expanding. Questioners pressed on the absence of environment and land in her framing; Heininen's rejoinder - that Indigenous knowledge is precisely knowledge of the environment, and its omission from geopolitical analysis is itself telling - became something of a throughline for the session.

Yet for all this scaling-up from individual scientist to field station, from national program to global platform each speaker kept returning to the people doing the work. Data sets do not interpret themselves: someone still must observe, gather, and make sense of what is collected and who that someone is, and who is left out, shapes what gets understood. The clearest lesson across the four papers may be the simplest: inclusion of geography, of scale, of peoples is not merely a courtesy extended to knowledge production but an important condition of its quality. The more voices and vantage points a network can hold, the better its data and its understanding.

Across all four papers, a shared intelligence did emerge, in the Academy's dialogic sense: Arctic "hubs," whether a physical field station, a data platform, or a curriculum, are simultaneously sites of knowledge production and instruments of authority, and that, in a period of fracturing formal cooperation, what continues to hold circumpolar networks together is not so much institutional as personal.

2nd Round of the Role Play Game:

11.30–13.00 Kiruna Folkhögskola

13.00–14.30 Lunch at Kiruna Arctic Thai and Grill (Old Town Centre, address: Föraregatan 18, 98134 Kiruna)

Meeting at Kiruna Town Hall & City Walk at the Downtown of Kiruna.

15.00–17.30 Meeting with Anders Karlsson, member of the municipal executive office.

(Rapporteur: Nicholas Glesby)

Calotte Academy 2026 participants visited city officials in Kiruna, Sweden, 200 kilometers north of the Arctic Circle in Lapland. The town's modern origins date back to 1900, when Per Olof Hallman designed the city to support the Luossavaara-Kiirunavaara AB (LKAB) iron ore mine. The Kiruna mine opened in 1898 and has already produced over 950 million tons of iron ore, with only one-third of the deposit's total output having been extracted to date. Annually, LKAB draws out approximately 15 million tons of iron ore, continuing to feed Europe's growing demand for critical minerals such as iron, copper, graphite, and rare earths. LKAB accounts for 80% of all iron ore mined in the European Union, enabling sovereign capacity for steelmaking. In 2023, LKAB also announced it was sitting on the largest known deposit of rare earths in Europe, which are essential for electric car battery and wind turbine production.

Kiruna is the largest municipality in Sweden, home to over 23,000 residents. Its reason for being was to support iron ore extraction, with railway linkages facilitating the movement of iron to market in the early 1900s. The Kiruna - Narvik Railway opened in 1902, allowing for global shipping of iron through the ice-free Narvik seaport. Hallman, who had worked with the influential architect Antoni Gaudí, used modern and revolutionary urban planning concepts for a "climate-adapted community plan." The location of original Kiruna was selected for its south-facing slope, its proximity to the mines, and its favorable microclimate on the hill, which meant winters would be less harsh. Streets followed the natural terrain to help avoid wind tunnelling and preserve panoramic views, rather than following a square grid. Instead of a large central park, smaller green spaces were created near street intersections, maximizing daylight and blocking wind.

LKAB's Kirunavaara mine sits directly underneath old, historic Kiruna. The mine, described as the world's largest and most modern of its kind, is 4 kilometers long, 120 meters thick, and 2 kilometers deep. Due to the mine's enormous size underground, 25% of Kiruna has experienced ground subsidence, with another 25% experiencing other side effects of the mining operation. Some researchers suggest the entire town will collapse into the mine by 2100. In 2004, the municipality decided to relocate the city center to accommodate the mine's continued expansion and operation. Construction of a renewed city center 3 kilometers east began in 2014, with the new city hall, Kristallen, and a shopping district serving as its focal point. Kiruna's historic church was moved over the course of two days by specialized flatbeds in August 2025, and the famous city hall clock tower now sits in the main town square. The relocation project, billed by city officials as the "world's most radical relocation project," is set to be completed by 2040.

As of summer 2026, 12,000 people have moved to new Kiruna, with 22,000 expected to move in total, alongside 800 houses moved and rebuilt. LKAB, which is state-owned, is financially compensating Kiruna residents for moving in accordance with Sweden's Minerals Act, having paid SEK 23.7 billion since 2006, and reserving another SEK 33.2 billion for future payouts (approximately € 6 billion total). Individual homeowners are compensated at independently assessed market value plus a 25% premium should they choose a financial payout over a replacement property. 90% of affected residents have chosen to move into a new property, and rental rates have been capped at 25% higher than their previous amounts.

Residents in New Kiruna have complained that the new town is 10 degrees Celsius colder, an effect of the tall buildings and long streets that create wind tunnels and block sunlight. The morale of Kiruna's residents has always been a priority for city planners, who acknowledge the harsh winter conditions and midnight sun. Adding to the challenges of Kiruna's relocation is that it is administratively landlocked, with most of the surrounding area protected by the national government - a designation dating to the late 1800s as a form of protecting national interests. The new location 3 kilometers to the east was chosen because the iron ore vein runs through the town and to the northwest, eventually creating the same subsidence problem the historic town faced.



17.30–22.30 Driving from Kiruna to Tromsø

Wednesday, 10 June in Tromsø

4th Session: “Arctic Geopolitics: Sovereignty, Great Powers & Collaboration”

09.00–12.00 Public Library of Tromsø

- Miyase Christensen, “Arctic today: geopolitics, economy and trade in precarious times”
- Ville Tiuraniemi, “From great power competition to subaltern geopolitics: A systematic literature review of agency in Arctic geopolitics”
- Kari Roberts, “Russia’s foreign policy priorities in the Arctic and the implications for Canada and NATO”
- Nicholas Glesby, “NORAD and NATO collaboration on the Northwestern flank”
- Hasan Akintug, “Greenlandic sovereignty and the United States: Rupture or continuation?”

(Rapporteurs : Rea Fraser & Inela Agolli)

The fourth session of Calotte Academy 2026 turned to how geopolitical knowledge about the Arctic is produced, contested, and acted upon by great powers, alliances, and Greenland itself.

Ville Tiuraniemi opened with a genealogy of Arctic geopolitics, tracing the field from traditional and Cold War geopolitics through critical geopolitics to a “2.0” variant inspired by Gerard Toal’s *Oceans Rise, Empires Fall*. Drawing on Colin Flint’s definition of geopolitics as struggle over the control of geographical entities, he presented a systematic literature review of 41 articles, finding that despite a turn toward critical approaches, states and intergovernmental organizations remain the dominant actors studied, while non-state and subaltern agency is still largely overlooked. Discussion probed how the Ukraine war, the Arctic Council, and non-human actors such as ice and animals figure - or fail to figure in the literature, and closed on the perennial difficulty of defining geopolitics itself.

Kari Roberts examined Russia’s Arctic foreign policy priorities and their implications for Canada and NATO. She argued that Russia’s documents frame the Arctic as a “zone of peace” even as its actions - cable-cutting, shadow-fleet activity, surveillance - suggest otherwise, a gap she read

through the lens of “strategic empathy”: understanding Russia’s threat perceptions without excusing its methods. Russia’s priorities, she noted, center on reorienting toward Asia, securing the Kola Peninsula, and resisting marginalization by the West. The dialogue pressed her on propaganda, the unprovable nature of cable-sabotage claims, and whether Western failures after the Cold War contributed to Russian distrust.

Nicholas Glesby detailed NORAD–NATO collaboration on the “northwestern flank,” explaining NORAD’s detect-deter-defeat mission and its modernization push—including the Golden Dome initiative and exercises such as Nanook Nunavut. He described the GIUK gap as an increasingly operational rather than purely strategic space, and fielded questions on burden-sharing (roughly 60/40 US–Canada), Nordic participation in early warning, and the limits of NORAD’s role in defending Greenland, which remains Danish territory.

Miyase Christensen offered a media and discourse-focused account of the Arctic as a “strategic frontier,” contrasting realist and critical geopolitical lenses and introducing the concept of “scalar refraction”—the way Arctic events are bent and amplified through other strategic geographies and global narratives, illustrated by the 2007 Russian flag-planting on the seabed. She highlighted four competing media frames (security, economic opportunity, environmental crisis, frontier) and warned that algorithmically curated, non-expert news increasingly shapes public understanding of the region. Discussion explored whether scalar refraction risks over-explaining events, and whether the Arctic has yet to “find its paradigm.”

Hasan Akintug closed the session with a historical and legal account of Greenlandic sovereignty vis-à-vis the United States, from the 1941 defense agreement through the 2009 Home Rule Act to the current crisis, in which Denmark’s intelligence services have for the first time described the US as a threat. He noted Greenland’s 2024 foreign policy stance of “nothing about us without us,” the ambivalence of younger Greenlanders toward US economic overtures, and the limited near-term prospects for mining given infrastructure constraints. Participants asked about UK and EU interest in Greenlandic minerals, and why US attention has focused on Greenland rather than Alaska, where security relevance is arguably more immediate.

Across all five presentations, a shared thread emerged: Arctic “intelligence”—whether scientific, military, or narrative—is never neutral, but actively shapes who is recognized as a legitimate actor in the region’s unfolding sovereignty contests.

12.00–14.30 Lunch & city visit at the downtown of Tromsø



3rd Round of the Role Play Game:

14.30–16.00 Sámi Library, Northern Norwegian Art Museum (address: Sjøgata 1, 9008 Tromsø)

16.00–17.00 Optional Museum Visit

17.00–22.30 Driving from Tromsø to Hetta

- Visiting Järämä Fortifications (outdoors) on the way

Thursday, 11 June in Kautokeino

09.00–09.30 Driving from Hetta to Kautokeino

5th Session: “Sámi Knowledge and Security as Parts of Arctic Intelligence”:

09.30–12.00 Boaššu / NOMAD Indigenous FoodLab, Kautokeino, Norway

- Fleur Santenac, “Sámi communities in the European Arctic: Navigating tensions between state-dependent governance and Indigenous self-determination in resource management decisions”
- Eleni Kavvatha, “Mapping Arctic intelligence: Sámi knowledge, EU governance, and participation in motion”
- Jukka Tarkiainen, “Security defined by the Sámi”
- Amanda Graham: “Northern intelligence: Post-secondary education, community capacity, and what Arctic security needs to learn”
- Sara Leandra Loosli, “Post-anthropocentric empathy – bodies resonating in permeability”



The fifth session examined how Sámi knowledge contributes to broader understandings of Arctic intelligence and security, challenging dominant frameworks that often prioritize state, technological, and geopolitical perspectives. Across the presentations, a key argument emerged: Arctic security and intelligence cannot be fully understood without recognizing Indigenous knowledge systems, local lived realities, and the uneven power relations embedded in governance structures.

Jukka Tarkiainen's presentation brought a deeply grounded and experiential perspective by examining how Skolt Sámi communities understand and live security in their everyday lives. Rather than treating security as an abstract or institutional concept, his work emphasized "lived security" as the ability to live one's culture in one's own way. His research explored how individuals define, sense, and experience security, highlighting that these understandings vary significantly depending on personal histories, family situations, and generational perspectives. In the context of the war in Ukraine and the closure of the Finnish-Russian border, security perceptions have shifted in complex ways. While some community members reported feeling physically safer, the closure also produced emotional and social consequences, including the loss of cross-border connections and a narrowing of everyday life. These changes resonated strongly with collective memories of displacement, particularly among older generations, reactivating historical fears and insecurities. Tarkiainen highlighted a pervasive sense of uncertainty, including concerns about whether it will remain possible to continue living as Sámi in the future. His central argument reframed the discussion from "what is security?" to "who defines security?", underscoring that definitions are not solely determined by state institutions but are shaped by communities themselves. In this sense, security emerges as a relational, context-dependent concept, influenced by lived experience, collective memory, and ongoing geopolitical change.

Amanda Graham's presentation examined what happens when security is understood from a local, northern perspective rather than through external geopolitical frameworks. She pointed out that regions such as northern Canada are often positioned at the margins of global security debates despite

their clear strategic importance. This disconnect creates what she described as an “intelligence gap,” captured in the contrast between “your Arctic” and “my North.” While policymakers may conceptualize the Arctic in abstract, strategic terms, for local communities, security is immediate, place-based, and deeply embedded in everyday life. Graham highlighted that discussions of preparedness and security must account for the realities of small northern communities, where infrastructure such as hospitals, transport, and communications systems are limited in number and capacity. These infrastructures are increasingly framed as dual-use, serving both civilian and security functions, which makes them simultaneously essential and vulnerable. In contexts where there is no redundancy, even minor disruptions can have significant consequences. Her analysis underscored that security cannot be “placed” onto the North without incorporating local knowledge and lived realities. Instead, place-based knowledge must be central to how Arctic security is conceptualized and implemented, challenging top-down approaches that overlook the complexity and fragility of northern systems.

Fleur Santenac’s presentation examined the structural tensions between state-dependent governance and Sámi self-determination in resource management, highlighting how Indigenous participation often remains constrained within existing institutional frameworks. While Sámi actors are formally included in governance processes shaped by Nordic welfare systems, EU policy, and international legal instruments, their ability to influence outcomes is frequently limited. This dynamic becomes particularly visible in debates around land use and environmental management, where Indigenous ecological knowledge is often side-lined by technocratic approaches. The subsequent discussion, including reflections by Anders Oskal, International Centre for Reindeer Husbandry, deepened this critique by drawing attention to shifting and often contradictory narratives imposed on reindeer herding communities. Oskal described a transition from a longstanding “double burden” narrative, combining environmental and economic pressures, to what he termed a “triple burden,” where shrinking pastures and climate instability are now accompanied by claims of overgrazing. This emerging narrative, often framed in political rather than scientific terms, portrays reindeer herding as a source of ecological risk, thereby legitimizing further restrictions on Sámi land use. Importantly, he noted that such narratives are not unique to Sámi but are replicated across other regions, including Siberia, reflecting broader global patterns of governance and knowledge production. These dynamics illustrate how knowledge itself becomes contested, with scientific, political, and Indigenous perspectives competing for legitimacy. At the same time, Oskal emphasized the importance of investing in youth and strengthening community resilience, particularly through initiatives such as the ARISE program, which seeks to empower Indigenous youth by combining traditional knowledge, scientific approaches, and new technologies. By fostering leadership and adaptive capacity, such initiatives aim to equip future Arctic actors to navigate and challenge dominant narratives. Together, these perspectives reinforce Santenac’s argument that current governance systems not only constrain Sámi self-determination but also shape the very terms through which environmental knowledge and legitimacy are defined.

Elena Kavvatha’s presentation critically unpacked the concept of Arctic “intelligence” by focusing on the relationship between knowledge, participation, and power within EU-Sámi governance. She highlighted a key tension between participation and actual influence, questioning whether Sámi actors, particularly reindeer herders, are treated as genuine rights-holders or merely as stakeholders within EU processes. While Sámi representatives are often invited into decision-making arenas, their

role may be limited to being informed rather than shaping outcomes, as illustrated by cases such as Kiruna. This raises deeper questions about who owns Arctic knowledge and whose expertise is considered legitimate. Kavvatha emphasized that decisions are frequently made in distant centers such as Brussels, often disconnected from the lived realities of Sámi communities and the land itself. Furthermore, EU funding structures tend to prioritize activities outside core Sámi areas, reinforcing uneven spatial and political dynamics. The discussion, including critical reflections by Anders Oskal, made these power imbalances even more explicit. Oskal pointed to what he described as “strategic ignorance,” whereby governance systems selectively recognize or overlook Indigenous knowledge and livelihoods, such as reindeer herding, depending on political priorities. He questioned dominant EU narratives around critical raw materials, asking “critical for whom?”, thereby exposing how global sustainability agendas can conflict with local realities. He also noted that while organizations like the World Reindeer Herders were previously included in international dialogues, this engagement has become more instrumental, for instance when the EU sought observer status in the Arctic Council. At the same time, regulatory frameworks such as mandatory environmental assessments may formally include Indigenous perspectives, yet do not necessarily translate into meaningful influence. Oskal further stressed the cumulative pressures facing reindeer herding communities, including predatory losses, land degradation, and serious social challenges such as youth suicides, underscoring that governance debates cannot be separated from lived realities. From this perspective, initiatives like EU Horizon projects were regarded with skepticism, as they are often designed to address EU priorities rather than Indigenous needs. Together, these insights reinforced Kavvatha’s central argument: the issue in Arctic governance is not simply participation, but the distribution of power and authority over knowledge production. Recognizing Sámi actors as rights-holders, and integrating local ways of knowing on equal terms, requires moving beyond procedural inclusion toward genuinely transformative governance structures.

Finally, Sara Leandra Loosli offered an alternative and more philosophical perspective by introducing the idea of post-anthropocentric empathy. Her work explored forms of intelligence that extend beyond human-centered frameworks, drawing inspiration from ecological systems such as mycelium networks. By emphasizing interdependence, symbiosis, and non-human communication, she challenged dominant assumptions about knowledge and intelligence. Her artistic and conceptual approach invited participants to reconsider how relationships between humans and the environment are understood. Although different in method and style, her contribution reinforced the session’s broader call to expand the concept of intelligence to include diverse and non-traditional forms of knowing.

In conclusion, the session demonstrated that Sámi knowledge is not merely an additional perspective but a fundamental component of Arctic intelligence and security. The presentations collectively highlighted the limitations of existing governance and security frameworks, particularly their reliance on narrow definitions of intelligence and their failure to fully integrate Indigenous perspectives. By foregrounding lived experience, local knowledge, and relational understandings of the environment, the session called for a rethinking of Arctic governance, that is more inclusive, context-sensitive, and capable of addressing the complex realities of the region.

12.00–14.00 Lunch & “Excursion to Čoarvemátta (Sámi National Teather, Sámi High School, Reindeer Herding School, and NOMAD Indigenous Food Lab)”

6th Session: “Militaryization vs Environmentalization”

14.15–15.45 Boaššu /NOMAD Indigenous FoodLab, Kautokeino, Norway

- Kristiane Width, “How is militarization as a ‘happy object’ among military families in Rovaniemi?”
- Antero Eerola, “Wild, wild North – risks of militarization and misinformation in the Arctic”
- Lassi Heininen, “Environmental destruction of warfare nullifies climate change mitigation objectives – the art of ‘strategy’”

(Rapporteurs : Varvara Kut’yina & Hasan Akintug)

This session included three presentations from Kristiane Width, Antero Eerola and Lassi Heninen.

Width’s presentation was titled “How is militarization as a ‘happy object’ among military families in Rovaniemi?”. In this presentation, she stressed that she intended to bring focus to the impact on Arctic militarization on local military families and how they perceive the new regional context. Her theoretical lens was based in social constructivism and the “cultural politics of emotions”.

Another important theoretical reference in her presentation was the study of political emotions. Kristiane discussed happiness as a social structure rather than simply an individual feeling. She noted that people do not always feel happiest in moments society defines as happy, such as weddings, which can, in reality, be stressful. In the same way, militarization may not only create anxiety. For some people, especially those connected to the defense sector, it may bring security, career opportunities, income, recognition and a sense of purpose.

The discussion included questions about the Nordic region and whether young people show interest towards the military amid geopolitical tensions. Width answered in the affirmative, point out the Finnish conscription system and an increased interest in the Finnish defense forces. Another question was about community integration with military activism in the area, which according to Width did show a positive sense of inclusion but she was also interested in the perspective of non-native citizens in the defense forces. Other questions included the shift in support in favor of NATO membership in Finland, the meaning of ‘happy families’ in her research project, and whether or not there has been an increase in women in the military as a result of the new social context.

The next presentation was given by Antero Eerola. He used the concept of “security dilemma” to analyze the heightened tensions between the NATO alliance and Russia. This meant that as either side took measures to increase their own security, the other side felt increasingly threatened.

Antero Eerola’s presentation focused on the increasing risks of militarization, misinformation and miscommunication in the Arctic, particularly in the context of the current confrontation between NATO, the EU, Ukraine and Russia. He framed the situation as part of a broader deterioration in European security, which some describe as a “new Cold War.” His main argument was that the Arctic is becoming increasingly affected by military expansion, intelligence activities and narratives of threat, all of which contribute to rising tensions and the risk of misunderstanding.

The Q&A session touched about questions such as the functioning of the Arctic Council, questions about misinformation and NATO relations with Russia. Finally, a question from the audience touched upon the European Union, and whether or not it could be considered a “peace project” considering the level of militarization currently taking place in the EU.

The last presentation of the session came from Lassi Heininen. He touched upon the paradox of realpolitik and the need to build trust to be able to address the global issue of climate change. He said that the contradiction between climate policy and defense policy is a sign of lacking intelligence by human societies and leaders which have missed the crucial issue of global climate change cooperation and the effects of military activity on the environment.

Although the theme of the Calotte Academy was “intelligence”, Lassi stated that his presentation only touched on intelligence indirectly. For him, the dominance of destruction in contemporary world politics reflects a lack of intelligence. He stressed that one does not need intelligence to create destruction. This was one of the most provocative points of his presentation: if destruction has become the leading feature of world politics, then the real question is why this is accepted and why decision-makers fail to act differently.

The Q&A session touched upon issues including how to deal with leaders who don’t believe in climate change. Heininen’s response stressed that climate denialism and a lack of intelligence was a universal problem among contemporary political leadership and not just a matter for a few countries. Issues such as disarmament and arms control as confidence building measures, criticizing people in power, and the role of peace movements were brought up. Heininen criticized the “mystification” of national security policy which shuts down debate and makes alternative conceptualization of security, beyond military policy, difficult.

4th Round of the Role Play Game:

15.45–17.00 UArctic EALÁT Institute, Kautokeino

17.00–18.30 Town visit and cultural walk in Kautokeino

19.00–21.30 Driving from Kautokeino to Hetta plus supermarket stop

Friday, 12 June in Hetta & Inari

7th Session: “Intelligence for Sustainability: AI vis-à-vis Law & Ethics”

09.00–12.00 Town Hall of Enontekiö, Hetta

- Tatyana Sarayeva, “Plural Arctic Intelligences: Ethical AI, Indigenous Knowledge, and Emerging Climate Governance Futures”
- Gerald Zojer, “Digital hegemony: The rise of techno-authoritarian neoliberalism as a challenge to human security in the European Arctic”
- Marta Koch, “Intelligence for sustainability? AI, data governance, and epistemic power in the Arctic region”

- Varvara Kut'yina, "Governing the invisible: Legal frameworks for AI-driven environmental monitoring in the Arctic"
- Tatiana Anderson, "AI health Nordic: Turning intelligence into value for Northern healthcare"

(Rapporteurs: Kristiane Width & Fleur Santenac)

The fifth day of the Calotte Academy 2026 began in routine order by now, namely consisting of a round of morning presentations by five of this year's participants. Artificial Intelligence (AI) was attributed as the central point of discussion, thus relating to the central theme of this year's Calotte. Based on the talks held by the presenters and discussion sessions, there are serious concerns regarding how to responsibly manage, interpret and implement the undeniably strong influence that AI has on an array of Arctic matters. Notably, the topics of big tech, health care, corporate social responsibility, legal space treaties and indigenous Arctic knowledge were flagged as the main gaps that are attributing to the crises of managing AI. Without clear AI governed guidelines, Arctic human security in particular faces serious threats.

In her research Tatyana Sarayeva looks at how AI interprets local perceptions of climate change by using sentiment analysis on postcard texts from Tromsø and identifying the gaps between machine-generated interpretations and the deeper meanings embedded in local knowledge. It highlights the asymmetry between what AI captures, primarily patterns in quantitative and textual data, and what it overlooks, such as place-based experiences, temporal observations, implicit assumptions, and the calibrated ambivalence people express when comparing local realities with global climate narratives. Building on this, the research explores how explainable and ethically grounded AI can integrate diverse forms of intelligence, including community, ecological, algorithmic, and geopolitical knowledge, while addressing issues of epistemic authority, trust, and knowledge justice. The project also asks how these models should be evaluated for accuracy, inclusivity, and practical relevance, and whether they genuinely benefit local communities and decision-makers. More broadly, it contributes to improving AI literacy in the Arctic and demonstrates how personal stories and local narratives can meaningfully inform climate-related risk awareness. Tatyana's presentation concluded with a discussion on the ethical, epistemological, and practical challenges surrounding AI. Questions focused on the lack of clear ethical boundaries, the reliability of AI-generated truth and knowledge claims, and the importance of transparency and careful consideration of sensitive information. Particular attention was given to Indigenous knowledge, emphasizing the crucial role of Indigenous peoples in determining how their data and knowledge are represented and used, as well as the need for greater plurality and knowledge justice. The discussion also addressed the often-precarious human labour involved in training AI systems, emerging connections between AI, surveillance, militarization, and critical infrastructure, and the wide range of AI tools used in research. Tatyana stressed throughout that AI should be understood as a tool rather than a source of unquestionable knowledge, with its appropriate use depending on the research context and purpose.

In his presentation, Gerald Zojer examined digital hegemony through the lens of political economy, arguing that dominant social forces shape both the ideas and material conditions that define contemporary society. Drawing on concepts of hegemony and economic imaginaries, it explains how powerful actors, particularly Big Tech companies, promote specific visions of digitalization that reinforce a techno-authoritarian form of neoliberalism characterized by market faith, privatization, deregulation, and private governance. While the early internet was rooted in ideals of openness and

digital utopianism, its commercialization shifted influence toward corporate actors whose values and economic interests increasingly shape technological development and public policy. Using insights from science and technology studies, the presentation emphasized that technologies are not neutral but are socially constructed by the values, assumptions, and contexts of their designers. In turn, these technologies reshape society through feedback loops that influence social behavior, institutions, and political and economic systems. The discussion also considers the implications of digital hegemony for human security and the EU Arctic. Although digital technologies can improve economic opportunities, healthcare, and public services, current digitalization policies often create new risks, including privacy violations, cyberbullying, behavioral addiction, environmental pressures from expanding digital infrastructure, and growing dependence on large technology companies. In Arctic regions, developments such as new data centers raise concerns about land use, resource extraction, ownership, and the preservation of local cultures and traditions, while potentially contributing to social exclusion. The presentation concludes that technology should be governed in ways that prioritize human development, community security, and democratic participation, advocating for greater use of free and open-source software and more inclusive approaches to technological design and governance. Gerald's presentation was followed by a Q&A focusing on the social and democratic implications of digitalization and AI. The discussion addressed the global and local influence of technology companies, the tension between opaque algorithms and democratic accountability, and the opportunities and risks of digitalizing welfare and healthcare services in sparsely populated Arctic regions. Gerald emphasized that digital tools can help fill service gaps but should not automatically replace physical services, particularly given concerns over privacy, data ownership, and the exclusion of elderly populations. Questions also highlighted limited public understanding of commercial platforms, algorithms, and complex consent mechanisms. Overall, the discussion stressed the need for greater transparency, public investment, and political oversight to ensure that digitalization supports rather than undermines accessible public services.

Martha Koch's presentation focused on presenting a new model aimed at understanding how digitalization shapes power dynamics and sustainable business development in the Arctic, recognizing the region as an extreme and exceptional environment for business and investment. A central contribution is the development of a novel climate extreme technology infrastructure readiness mapping methodology, known as the "bullseye" method. This approach combines the 9 Community Capitals Framework with NASA's Technology Readiness Levels (TRLs) to evaluate not only the maturity of technologies but also the social, economic, environmental, and institutional capacities needed for their successful adoption. By integrating technological readiness with community resilience, the framework provides a more holistic tool for planning sustainable innovation and infrastructure development in Arctic regions. After Martha's comprehensive and interactive presentation, there was time for one question. Question: In regards to the privacy of data, how can this be done? A: Great question, and this is where terminology is key. The Arctic is seen as a risky investment, because of the extreme climate, and being viewed as 'different', perhaps because of the exploitation possibilities- but there is no justifiable explanation for this.

Varvara Kut'yina, "Governing the invisible: Legal frameworks for AI-driven environmental monitoring in the Arctic" Varvara's presentation used two specific case studies narrated in space to illustrate how legal frameworks in space are affecting AI- driven environmental monitoring. More specifically, the two studies focused on climate change patterns particular to the Arctic regions.

Additionally, the case studies highlighted how the Arctic region is affected by the use of different methods and instruments, with the goal of producing more predictable Arctic forecasts in the future. More importantly, Varvara bridged the gap between science and the use of artificial intelligence, as she explained that Arctic weather satellite stations collect raw environmental data and turn into knowledge AI boxes to capture pictures from space. This method allows humans to compress raw data through AI with data- something that has not been possible to do, thus omitting imperative information about understanding how the Arctic atmosphere is affected. In Svalbard this method has been tried through receiving data, which is processed through algorithms in order to be signed off into readable measurements. A key takeaway that Varvara pinpointed to in her presentation was the role of responsible quality, which is a necessity for the matter of law, to keep open access to the data. With better Arctic forecasting, public policy improves which is imperative to combat climate change by identifying anomalies in marine ecosystems and detecting wildfires from thermal signatures- a feature that the European Union is doing for the first time, by using AI. While the use of AI in space is incredibly valuable for Arctic states and more notably, to conserve the melting icebergs, the concluding part of Valvera also raised concern to the problem in regards to legal repercussions of the two case studies, where the gray zone is in majority, thus undermining the role of important treaties such as UNCLOS. Additionally, the European Union AI act is unclear. The question remains: Who are the authorities to narrate the changing Arctic? Varvara cleverly expressed her own use of AI in prompting her presentation and left the participants with food for thought: who owns the script? Varvara's presentation was followed by a discussion on the legal and governance challenges surrounding AI-driven environmental monitoring from space. Questions addressed geoengineering, the lifecycle and ownership of satellites, the increasingly complex ownership and transfer of AI-generated data, and the role of the Arctic Council and Indigenous peoples in decisions about data use. The discussion also highlighted the growing problem of space debris and the limitations of existing international law, while noting efforts by the UN and EU to develop clearer rules for sustainable satellite operations and end-of-life management.

Tatiana Anderson's presentation explored how demographic change is driving the adoption of AI and digital health solutions in the Nordic region, particularly in sparsely populated areas such as Kainuu, Finland. Declining birth rates, the outmigration of young people for education and employment, an ageing population, and the closure of local schools are contributing to a shrinking workforce and increasing demand for healthcare services. These challenges are compounded by long travel distances to healthcare facilities and shortages of healthcare professionals, including specialists. In response, policymakers are looking to international recruitment, immigration, and AI-supported workforce optimization to help sustain healthcare systems while shifting from reactive treatment toward predictive and preventive care. A central focus is the AI-HEALTH Nordic project, which runs until March 2028 and aims to improve healthcare access for remote communities through AI-powered smart care solutions. Rather than treating small municipalities as passive testing sites, AI-HEALTH Nordic positions them as active co-creators and long-term partners in the design, implementation, and scaling of digital health solutions. This collaborative approach seeks to ensure that AI technologies respond to local needs, strengthen healthcare resilience, and support sustainable service delivery in remote Nordic communities. The lecture also notes that while digital solutions have the potential to improve preventive healthcare, simply reallocating funding between different parts of the healthcare system does not resolve underlying structural issues, highlighting the need for broader systemic transformation alongside technological innovation. The morning session was concluded with a brief

question and answer session. Question 1: I am curious about Finnish grandparents, are they receptive to this change and how will walking robots be feasible in the harsh Arctic winters? A: I have more questions than answers at the moment, given that our project launched ground in April of this year (2026), meaning we have not yet had time to assess the prototypes. Question 2: Your project concerns Finland, but is this a problem in other neighboring Arctic states like Norway and Sweden? A: Most definitely. While Norway has oil and gas, there is a lack of funding to social welfare. Question 3: We experience the same problem in Alaska, why is there not a circumpolar approach to address these issues? A: Great idea! Question 4: I am curious about the technical infrastructure, will that be needed or can you pull it off with what is already here? A: We are sufficing with what already existing.

12.00–13.30 Visiting Enontekiö Arctic Airport

- Meeting with Jussi Sorsa, CEO

13.30–15.00 Lunch

15:00–19:00 *Driving from Hetta to Inari*

20:00–22:00 Laavu & open fire in Vasatokka



Saturday, 13 June in Inari & Ivalo

8th Session “Dialogues, Participation & Operational Intelligence”

09.00–11.00 Wilderness Hotel Inari

- Inela Agolli, “Track 2 Dialogues as intelligence spaces: Informal knowledge networks in times of geopolitical freeze – insights from the High North Talks”
- Maide Cebi, “The ultrastructures of intelligence: A multi-scale connectomic approach to the neural architecture of cognition”
- Jennifer Lynn Rheman, “Operational intelligence in the polar regions: Bridging policy, risk, and cooperation across the Arctic, Antarctic, and wider cryosphere”
- Jia Wang, “Employee participation as an internal participation system: An inclusive service design perspective on hybrid workplaces”

(Rapporteur: Ville Tiuraniemi & Inela Agolli)

Inela’s presentation revolved around informal knowledge networks. In the context of growing geopolitical tensions and the erosion of formal cooperation mechanisms in the Arctic, informal dialogue platforms have emerged as critical instruments for sustaining communication and fostering trust among stakeholders. The Geneva Centre for Security Policy’s (GCSP) High North Talks (HNT)

exemplify such Track 1.5/2 diplomacy initiatives, bringing together officials and non-official actors - experts, academics and practitioners - in settings that combine the legitimacy of Track I with the flexibility of Track II. Launched in September 2022, the HNT provide a discreet and neutral space where representatives from Arctic and non-Arctic states and actors can engage in open exchanges on key regional challenges, including security, environmental change, governance and scientific cooperation. This contribution examined the role of the High North Talks as a transnational dialogue platform shaping knowledge production, policy framing and strategic awareness in Arctic affairs. In a fragmented geopolitical landscape marked by reduced official dialogue, such initiatives provide a discreet space for sustained exchange among experts, policymakers and practitioners. Beyond facilitating discussion, the High North Talks contribute to the dissemination of policy-relevant insights, helping translate expert knowledge into accessible formats that inform decision-making processes - through shuttle consultations with policymakers, participation in conferences and panels, and publications. Through this iterative exchange, they indirectly influence policy debates by framing key issues, identifying shared priorities and fostering a nuanced understanding of Arctic dynamics. By bridging perspectives across academia, scientists, policy and local stakeholders, they support informed dialogue and confidence-building, helping mitigate the risk of the Arctic evolving into an arena of intensified conflict. By situating the High North Talks within the broader framework of science diplomacy and informal mediation, the presentation highlighted their relevance for the Calotte Academy's interdisciplinary mission. It argued that sustained, informal and inclusive dialogue is essential to address shared Arctic challenges and preserve the region as a space of cooperation, and reflected on how such platforms can contribute to a more secure and predictable Arctic future by identifying common interests and fostering collaborative approaches across political divides.

During the following discussion, there was interest in knowing how different groups are chosen and integrated into the talks. There is consultation involved in choosing who gets to represent their reference group, with influence and links to their home governments deemed important. The talks are confined to concern the Arctic region only, and it's important that a safe environment is created for the participants so that they don't feel the need to censor themselves. Youth voices, especially Indigenous youth, were deemed important, along with getting a more balanced participation by involving more women. It was stressed that the participants don't represent their home countries; this is often the case why scientists are involved in the talks, but can be more tricky with Russian participants who have to report to their superiors. All in all, the talks require time and patience, as there is a need to build trust between participants. Even small steps were found crucial, as there is a large societal need for diplomacy to prepare for future crises. A further line of questioning concerned how facilitators handle more difficult or entrenched participants, and how discussions are kept constructive when views diverge sharply. It was noted that specific facilitation techniques are used to manage such dynamics - including reframing contentious statements, managing speaking time and turn-taking, and steering the conversation back to shared interests when it risks becoming adversarial. Equally important, it was stressed, is ensuring that the right people are in the room in the first place: participants who are close enough to their governments or institutions to credibly relay outcomes and brief policymakers, so that the insights generated can genuinely feed into official thinking. This exchange underscored why creating and carefully curating such informal spaces matters: they only retain their value as confidence-building and policy-shaping tools if participation, facilitation and follow-up are all deliberately and consistently managed.

Maide's presentation "The ultra structures of intelligence: A multi-scale connectomic approach to the neural architecture of cognition" was rare in the sense that it was the only presentation in this year's Calotte Academy in natural sciences. Her presentation is based on a project in the field of connectomics, that studies the brain and nervous system and how neurons in them interact and connect with each other, producing behavior and cognition. The project focuses on the prefrontal cortex (the front part of the brain), injecting protein into it to allow following neuron connectivity through signals. This makes mapping the brain possible, focusing on certain connectivities by expanding them by embedding them in hydrogel and then water. Discussion participants were captivated by the visual images and animations used in the presentation (that we sadly cannot see here), which were all made by Maide. The discussion then turned to how Maide got interested in this project and the Arctic: a student of systems biology, she got interested in neuroscience. She's been interested in Arctic science, and the connectivity of everything also ties this project to the Arctic. Her narrative of the region was impacted during this Calotte academy; she didn't have the knowledge before but now understands the complex levels of it.

Jennifer's presentation "Operational intelligence in the polar regions: Bridging policy, risk, and cooperation across the Arctic, Antarctic, and wider cryosphere" focused on how polar information from the field travels to administrative tables and what problems and interruptions may arise within these processes. The presentation highlighted the establishment of the The Scientific Committee on Antarctic Research (SCAR) in 1958, coordinating scientific research between states and bases in the Antarctic region, which eventually lead to the birth of the Antarctic Treaty in 1959. This treaty enables among other things unannounced visits to other bases within the region and the requirement to share scientific data with others, promoting transparency. The presentation then observed problems within information processes in the framework of USAP (United States Antarctic Program). These involved siloing between different groups in the system, limiting the sharing of information between these groups; identity questions of who belongs to USAP, as there are many different contractors and people with generational history in the organization, affecting whose voices seem to matter most; hierarchy and power games coming into play, as higher ranking members can stall operations; and finally expertise and authority being pit against each other, highlighting that those who often do fieldwork don't have the power to do decisions. These interruptions in information flows create governance risks, requiring solutions.

During the discussion, it was asked what the Arctic could learn from the Antarctic systems, with more communication between working groups deemed as important. It was brought up that visits between bases are not "unannounced" due to practical reasons, as travel distances are long, and some visits have been blocked completely. Private corporations could strengthen regional cooperation by providing funding. The future of the Antarctic treaty was then brought into question, as it has been affected by geopolitics between member states, with initiatives and visits blocked. However, the near future seems safe with member states holding up the treaty.

Final presentation of the session, Jia's "Employee participation as an internal participation system: An inclusive service design perspective on hybrid workplaces", covered how hybrid model of work can create new opportunities in the workplace but also challenges in communication and participation of employees. The presentation was based on a project where managers from different Finnish

companies were interviewed, while inclusive service design was used as a framework to understand how to aim for better participation and remove obstacles for employees. The interview data was then analyzed and divided into four categories: access, voice, influence and translation into action. Some of the key findings of the project were that participation is not a coherent process, as access to participating does not necessarily lead to having a voice, and having a voice does not automatically lead to having influence. Therefore, the participation of employees rarely lead to concrete actions. The use of digital tools were found to lead to fragmentation, as information coming from multiple sources causes confusion. The management level should make the participation of different voices possible and enable an understandable system for participation, which in turn demands for inclusive service design. The following discussion was sadly cut short due to strict time constraints, but managed to touch upon themes such as the size and structure of companies affecting results and the use of different digital tools such as email, Whatsapp, Slack etc. and the inconsistency of information flow coming through them.

5th Round of the Role Play Game:

11.00–11.45 Vasatokka

12.00–13.30 Lunch

13:30–14.00 Driving from Inari to Ivalo

9th Session “Energy, Mining & Space” and Meeting with Mayor Tommi Kasurinen

14.00–16.00 Town Hall of Inari

- Rehan Tahir Sabbih, “Competing forms of intelligence in Arctic resource governance: Indigenous rights and state policy rationalities”
- Andrei Diaconescu, “Global mineral securitization and the EU’s regulatory approach to energy security in the Arctic”
- Tom Gabriel Royer, “Extracting the emptiness: EU space law and Earth-space extractivism at the ‘polar gateway to space’?”

(Rapporteurs: Jia Wang, Rea Fraser, Tom Gabriel Royer)

Meeting with members of the Inari municipal team

At Inari Town Hall, we were welcomed by kunnanjohtaja (“Municipal Manager”) Tommi Kasurinen, Administrative Director Mari Palolahti, and Chairman Jari Huotari. Kasurinen explained that Inari’s kunnanjohtaja is a civil servant. He then presented some facts about the municipality. Spanning around 5% of Finland’s total land area, Inari is the only Finnish municipality with 4 official and educational languages: Finnish, Northern Sámi, Inari Sámi, and Skolt Sámi. He emphasized the importance of tourism for development, citing the recent opening of Tokmanni’s northernmost store in Ivalo. He was also pleased that reindeer herding, fishing, and Sámi handicrafts remain important.

Asked about tourism planning, Kasurinen and Palolahti stressed the importance of regulating where tourism takes place: by engaging with stakeholders. On the topic of social pressures linked to tourism: Kasurinen said that while these are relatively limited, “we need to stay careful”. Palolahti added that local ownership of key tourism assets and the sharing of benefits foster trust in tourism operators. Questions also addressed the environmental impacts of industrial and military activities. Kasurinen explained that Inari has banned large-scale mining and wind power development within its territory. While this involves significant economic trade-offs, it reflects the municipality’s ecological values. Finally, asked about the proximity to Russia — ca. 39 kms — he described longstanding family, cultural, and religious ties; e.g., Orthodox and Lutheran communities keep on organising joint events. Before the break, Professor Heininen reflected on the value of interdisciplinary collaboration, arguing that this remains less common than it should be. He noted with satisfaction that this year’s Calotte Academy had brought together participants from 18 countries and nearly as many disciplines.

Rehan Tahir Sabbih’s presentation

Among multiple forms of governance intelligence in Arctic resource governance, Sabbih highlighted Indigenous Knowledge Systems (IKS), quoting our Kautokeino host Anders Oskal: “Indigenous knowledge is a knowledge that works”. He then outlined his own review paper examining structural challenges in Arctic resource governance, giving an overview of his four case studies (situated in Canada, the USA, Greenland, and Russia) and contrasting them with IKS-informed approaches. One participant questioned whether the paper risked treating Indigenous peoples as a homogeneous category while relying predominantly on state-centered frameworks. Sabbih acknowledged this as a limitation of the project, explaining that the state remains an important analytical frame but that moving beyond state-based perspectives would require a substantially larger comparative study. Another participant addressed the diversity of Indigenous experiences, suggesting that the Nenets in the Yamal–Nenets region could be viewed as “winners” because of their cooperative relationship with Russia. Sabbih replied that the limited availability of data from Russia constrained the analysis and argued that stronger academic collaboration and further fieldwork would help address these gaps. The final question focused on the extraction not only of material resources but also of qualities such as peacefulness and the effects of large-scale projects on people’s relationships with the land. Sabbih replied that Indigenous peoples should be treated as partners in governance rather than as competitors.

Andrei Diaconescu’s presentation

Diaconescu situated his presentation within global transformations linked to the increasing importance of critical raw materials (CRMs). He reflected on the notion of criticality, arguing that the designation of minerals as ‘critical’ structurally shapes priorities to address supply risks and enhance supply chain resilience. From this viewpoint, Diaconescu argued that terrestrial mining, deep-sea mining (DSM) and space resource extraction (SRE) are increasingly framed as issues of national security. He noted the importance of strategic projects and partnerships, and circular economy, as well as the multiple uses of minerals in civil, space and military applications. Turning to DSM, he outlined the international legal framework established under the United Nations Convention on the Law of the Sea (UNCLOS). He highlighted the matter of distinction in the area of the seabed beyond national jurisdiction, between the principle of the ‘common heritage of humankind’, and the freedoms of the high seas.

One participant raised the legal status of SRE, observing that the Moon Agreement has not become a broadly accepted framework governing lunar resource extraction. Another participant questioned

whether expanding SRE shifted environmental pressures away from Earth. Further, Diaconescu emphasized the common heritage of humankind principle established by customary international law and the UNCLOS in areas beyond national jurisdiction, and the non-appropriation regime under the Outer Space Treaty, as well as the states' increased focus on the importance of in-situ resource utilization (ISRU) to develop space operations and reduce the dependencies on resources from Earth. The discussion then went "back to the Earth": a participant stressed that terrestrial mining should not be overshadowed by discussions of space mining. Diaconescu remarked that debates on resource extraction should consider climate change and environmental responsibility. The final discussion addressed the potential of biomining to recover valuable materials from waste streams, including possible future applications in space-based resource recovery.

Tom Gabriel Royer's presentation

Royer opened by performing a violin-accompanied excerpt from Jason Mraz's *My Kind*, before discussing what he termed "terrestrial extractivism for space purposes" in the Arctic. He noted that while EU space capabilities are framed as fostering Arctic sustainability, this policy vision contrasts with critical scholarship which views space activities (and the legal frameworks that support them) as forms of extractivism. Drawing on Sheehan (2018) and Sörlin (1989), he discussed the Esrange Spaceport; according to this scholarship, the 'emptiness' of the area has been constructed as a resource available for extraction, thus extending earlier patterns of land use. Royer referred to developments including the consultation process preceding the construction of the rocket testing range in 1961 — which he argued failed to meaningfully reflect Sámi concerns. He asked whether the EU Space Act (proposal) is in this continuity. While his article is still in the making, he was already able to argue that the proposal contains no explicit provisions tackling issues such as noise impacts, land-access conflicts, or Indigenous rights. Royer concluded by reading a poem by Terry Omø reflecting on disused infrastructure. It emphasized his argument in favor of developing space infrastructure with greater socio-environmental consideration, including after their operational life. The poem closes: "We've created monsters, / Thank goodness they're asleep."

The questions focused on the link with mineral extraction, as well as the concepts of multispecies justice and mitigation strategies.

Finally, Professor Heininen closed the Academy by encouraging participants to take time to "recover" from the Calotte Academy, as it takes time to process such an intensive experience.

16.30–18.30 Visiting UTAC:

- Meeting with Teemu Hartikainen, Quality and Development Manager
- and Janne Seurujärvi, Vice-President Finland

19.00–20.00 Visiting PaPaNa pub

21.00–24.00 Traditional sauna & swimming in Vasatokka

Sunday, 14 June in Sodankylä

09.00–11.45 Driving from Inari to Sodankylä

Final Round of the Role Play Game:

12.00–13.30 Sodankylä Local Heritage Museum (Sodankylän Kotiseutumuseo)

13.30–15.30 Lunch & Town Visit in Sodankylä

15.45–18.00 Driving from Sodankylä to Rovaniemi

- *Arrival at the airport by 17.30 and railway station by 17.45*

ABSTRACTS

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Track 2 Dialogues as Intelligence Spaces: Informal Knowledge Networks in Times of Geopolitical Freeze – Insights from the High North Talks

Periods of geopolitical tension increasingly restrict formal diplomatic channels, particularly in regions like the Arctic where scientific cooperation, environmental governance, and security dialogue rely on delicate multilateral frameworks. In such contexts, Track 2 dialogues- informal, trust based exchanges among experts, scientists, mediators, Indigenous representatives, and policy practitioners- become critical platforms for sustaining communication. This paper argues that these arenas function as intelligence spaces: ecosystems that generate, validate, and circulate nuanced forms of knowledge when official avenues are stalled or suspended.

Using the High North Talks (HNT) as a central case study, the paper examines how Track 2 mechanisms cultivate a blend of relational, cognitive, and anticipatory intelligence. HNT's flexible, participant driven architecture enables the sharing of observations, weak signals, and grounded assessments that may not surface in formal diplomatic structures. Through the integration of diverse epistemologies (scientific expertise, geopolitical analysis, Indigenous knowledge, mediation practice, etc.) HNT enhances collective sense making during periods of geopolitical freeze. Participants draw on personal and professional networks to maintain situational awareness, cross check narratives, and identify emerging risks or opportunities for deescalation.

The paper introduces the concept of Track 2 intelligence to describe this hybrid knowledge production process. It highlights how informal dialogues can preserve continuity between communities, support early warning, and maintain the conditions for future cooperation even as state level relations deteriorate. By framing Track-2 arenas as vital components of Arctic epistemic infrastructure, the paper contributes to broader debates on intelligence, governance, and resilience in the face of global multi crises.

Ultimately, it shows that in moments of political stasis, informal knowledge networks such as the High North Talks constitute indispensable instruments for understanding, navigating, and potentially transforming complex geopolitical realities.

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Greenlandic Sovereignty and the United States: Rupture or Continuation?

In an era of heightened geopolitical tensions, the question of the relevance of sub-state foreign policy agency (i.e. paradiplomacy) remains somewhat understudied. The Greenland crisis since 2025 exemplifies the continuing relevance of parallel diplomacy and hence external sovereignties of non-state polities. The 47th US President consistently discusses Greenland as property or territory to be acquired, with no regard to the existing governance structures in Greenland. When pushed back on its demands to acquire Greenland, the US administration then agreed to the establishment of a “high level working group” between Greenland, Denmark and the US for further discussions in January 2026. This brings the question of how these new aggressions from the US will have an impact on an ever-assertive Greenland’s paradiplomacy and its engagement with the US. The current structures of US-Danish-Greenlandic cooperation take place in the Joint Committee and Permanent Committee which already have a trilateral nature and the new “high level working group” seems to continue this tradition. This is a recognition of Greenland’s sovereign legitimacy despite the otherwise hostile imperialist rhetoric. The long-standing trend in Greenland has been near unanimous support for independence from Denmark, even if the exact process of realizing this remains ambiguous. The implications of increased independence has meant that as opposed to dependency to Denmark, increased relations with the North American Arctic would be preferable for Greenland. This paper will analyze the treaties governing the US military presence on Greenland, Danish policy documents regarding Greenland and the Arctic, and recent documents produced by Greenlandic authorities through a constructivist lens. This will be done in order to put forward and compare the understandings regarding the core political concept of sovereignty from three polities (Greenland, Denmark, the US) that are active on the territory of Greenland. By analyzing how sovereignty is constructed by the three polities in Greenland, this paper aims to discuss potential future scenarios for sovereignty in Greenland.

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AI Health Nordic: Turning Intelligence into Value for Northern Healthcare

Artificial intelligence creates value only when it responds to real needs. This presentation introduces AI Health Nordic, a recently started Interreg Aurora project that applies the AIKA Ecosystem’s practical piloting model to health and wellbeing services across the Nordic.

Rural and Arctic regions face growing challenges, including ageing populations, long distances, limited healthcare resources, and the need to maintain quality of life in sparsely populated communities. Led by Kajaani University of Applied Sciences, with Nord University and Luleå University of Technology as partners, AI Health Nordic brings together universities, municipalities, healthcare providers, and SMEs in Finland, Sweden, and Norway.

The newly launched project examines how AI can be translated into practical solutions through real-life pilots, competence building, and SME-driven innovation. It frames intelligence not only as technology, but as a shared regional capacity to understand local needs, test solutions responsibly, and create value for northern communities.

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Sensing or Seizing? Arctic Observation, Environmental Intelligence and the Scramble for Influence

The Arctic is changing faster than we can adapt. Accelerated warming, declining sea ice, shifting ocean conditions, expanding maritime activity, and infrastructure vulnerability are increasing the demand for reliable environmental knowledge. At the same time, renewed geopolitical rivalry is redefining, restricting and even dismantling long-established knowledge-sharing networks. This tension makes the Arctic a key region for rethinking “intelligence” as the capacity to sense, interpret, share, and collectively act upon environmental change.

This talk uses environmental intelligence as a lens to examine how Arctic environmental signals are sensed, processed, interpreted, shared, contested, and converted into operational, political, and strategic knowledge. Satellites, autonomous sensors, ocean and seabed monitoring systems, research stations, digital data platforms, and Indigenous and community-based observing networks can strengthen forecasting, navigation safety, emergency preparedness, climate risk assessment, environmental stewardship, and scientific cooperation. Yet these systems are not politically neutral. They shape what becomes knowable, contested, shared, and converted into authoritative forms of knowledge. Ultimately, as these systems expand, they can determine who gains long-term strategic influence in the contested Arctic.

Drawing on work in marine systems, environmental monitoring, ocean data infrastructures, and ocean governance, the talk examines whether expanding national and international Arctic observation infrastructure can support collective intelligence, resilience, and cooperation, or whether it is being drawn into a wider struggle over strategic presence, data control, technological dependency, epistemic autonomy, and legitimacy. It argues that the central challenge is not how to sense the Arctic environment more effectively, but how to govern the conversion of environmental data into shared intelligence. Responsible Arctic observation requires trusted data-sharing, inclusive governance,

institutional accountability, and recognition of plural knowledge systems, so that environmental intelligence strengthens cooperation and resilience rather than enabling strategic dominance.

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The Ultrastructures of Intelligence: A Multi-Scale Connectomic Approach to the Neural Architecture of Cognition

Co-authors: Dr. Anna Stępień-Czarniecka and Dr. Angeliki Vavladeli, ETH Zürich

The Arctic is a system defined by connectivity across scales. microscopic exchanges, species interaction webs, permafrost dynamics, and large-scale climate teleconnections give rise to adaptive behaviour. Intelligence, too, is not a property of any single scale but an emergent consequence of connectivity: from nanometre-scale synaptic architectures to brain-wide projection networks. Understanding it demands tools capable of traversing those scales without sacrificing resolution.

The prefrontal cortex (PFC) is central for cognition, orchestrating working memory, decision-making, and emotional regulation through its extensive interactions with distributed brain regions. However, a fundamental methodological gap persists: the circuits implementing these computations span centimetres of tissue while depending on nanometre-scale synaptic organisation. Existing approaches either achieve the resolution necessary to resolve synapses or the scalability to survey brain-wide connectivity, rarely both.

Presented here is a project establishing a multi-scale imaging workflow to bridge that gap. Light-sheet microscopy combined with whole-brain tissue clearing first provides mesoscale mapping of PFC projection circuits in mice. Regions of interest are subsequently selected and processed using the LICONN (Tavakoli et al.) framework — iterative hydrogel expansion achieving up to 16-fold physical enlargement — enabling synaptic-resolution imaging on a confocal microscope, with simultaneous molecular labelling of structural and synaptic markers. This approach makes it possible to move continuously from brain-wide connectivity to the ultrastructural detail of individual synapses within the same sample.

The mouse PFC shares evolutionary and architectural homology with its human counterpart, with conserved circuit motifs underlying cognitive capacities central to intelligence. By resolving the structural logic of these circuits in a tractable model organism, this work contributes to a broader and transferable understanding of the neural substrates of intelligence.

Miyase Christensen

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Arctic Today: Geopolitics, Economy and Trade in Precarious Times

This talk elaborates on the evolving geopolitics, trade dynamics, and economic prospects of the Arctic amid intensifying global competition. It analyzes how climate change, new shipping routes, and resource access are reshaping strategic interests among Arctic and non-Arctic states, highlighting tensions between cooperation and rivalry in governance frameworks. It also touches upon how infrastructure development, energy markets, and emerging trade corridors are influencing regional economies and global supply chains. Finally, it also considers how media narratives and news shape public understanding of Arctic issues, often amplifying security frames while underrepresenting local perspectives and environmental risks, thereby influencing policy debates and international perceptions of the region.

Andrei Diaconescu

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Global Mineral Securitization and the EU's Regulatory Approach to Energy Security in the Arctic

In the contemporary global landscape characterized by paradigm shifts and reactivity caused by geopolitical and market shocks, states are racing to strengthen domestic resilience against supply disruptions. Global leaders view the Arctic as a new field for competition based on the thawing of the permafrost, sparking interest through potential access to resources such as oil and gas, minerals, as well as new trade and access routes. Arctic is envisaged as an important component of long-term energy security, due to potential access to resources, or lack thereof compared to competitors. While competitors such as Russia, China, and the U.S. are advancing steps to secure access to the Arctic resources and routes, the EU will want to protect its position. The evaluation of EU's direction regarding the Arctic is imperative, as part of the status quo of future energy security. Notably, EU's access to the Arctic is significant compared to previous resource-intensive regions such as the Gulf. To the context may be added the effects of the third Gulf war, including the need for an evaluation of the extent to which recent developments labelled as the greatest energy crisis might be used as an argument to claim further access to the Arctic. Security is a response to threats, but also a speech act designed to justify extraordinary measures. Militarization contributes to enhancing minerals demand as a basis to increase the production of mineral output. The research examines securitization narratives based on the need to secure mineral supply chains, in relation to the Arctic region, including Greenland, and the deep seabed. It addresses the European Union's legislative and policy initiatives designed to protect interests in the Arctic region, particularly with respect to energy security and

critical raw materials. The research includes in the analysis the extent to which energy- and mineral security is prioritised against decarbonisation.

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Wild, wild North – risks of militarization and misinformation in the Arctic

Intelligence – as services provided by the security and intelligence organizations – is one of the key factors in security political decision making. It is also a key element in defense politics and military planning. In my presentation I try to analyze how rapid militarization of Arctic region has increased the interest of especially Western intelligence services to the region.

Classic security dilemma between states, who consider themselves as adversaries to each other, is obvious in the Calotte region. NATO membership of Finland and Sweden and the DCA between Finland and the US and Sweden and the US will lead to increasing US military presence in the Arctic.

This in turn has led – and most probably according to statements by Russian leadership will lead – to increased countermeasures by Russia. NATO considers this as a threat and increases its deterrence, which again is considered as a threat by Russia. In strategic defense planning of NATO, the US and Finland Arctic region and Baltic Sea are considered as one entirety. In NATO countries Baltic Sea has been a scene of misunderstandings – or even misinformation – in security and intelligence operations. NATO countries consider Russia to be active in various hybrid operations in the Baltic Sea.

Although political and media attention around cable disruptions – or suspected sabotage – could be described as alarmist, Finnish security and intelligence officials (including Security and Intelligence Service Supo or National Bureau of Investigation KRP) have not found any evidence – even in pretrial investigations – of foreign hybrid operations.

Could these misunderstandings lead to escalation in Calotte region as well?

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“Touch Grass” - Experience, Information and Youth Narratives in Soft Climate Denial

“Touch grass,” an internet slang phrase urging reconnection with the physical world to counter absorption by algorithmic driven media, captures a growing tension between digitally mediated knowledge and lived experience. This presentation, from the perspective of a civil society practitioner, examines how “intelligence” is being reshaped within contemporary forms of soft climate denial and anti-establishment discourse. It draws on practice-based insights from working directly with youth in environmental contexts, offering a perspective that complements and challenges academic approaches to knowledge production.

While overt climate denial has declined, it is increasingly replaced by diffuse skepticism expressed through disengagement, relativism, and selective trust in information sources—often framed as autonomy grounded in personal experience. This shift toward self-trust over expert, data-driven knowledge coincides with an expanding experiential gap: many young people encounter environmental issues primarily through digital media rather than direct, embodied interaction with ecosystems.

At the same time, youth are navigating an overabundance of AI generated information heavily based on social media algorithmic filtering as well as politically driven misinformation. These information sources outpace the rigor of scientific research on environmental issues. The challenge is therefore not a lack of information, but a deficit of engagement with scientific knowledge that can penetrate AI driven information environments. This is further compounded by a perceived lack of public and private sector accountability, as limited policy action on environmental science contributes to declining trust in the entities that can provide both experiential information and academic research. Youth trust only their own lived experience, yet that experience is increasingly lived online.

Civil society actors occupy a critical position at this intersection, both as providers of experiential learning and as translators of scientific knowledge into general audience dissemination formats. The presentation will argue that their insights must be taken seriously within academic and policy debates. Addressing soft climate denial requires not only that youth “touch grass,” but that they can link lived experience with scientific knowledge to navigate information environments and make informed decisions.

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NORAD and NATO Collaboration on the Northwestern Flank

North American defense is the backbone of the NATO alliance and trans-Atlantic security. Canada and the 5 Nordic nations have reaffirmed collaboration to “enhance security in the Arctic, and ... support the efforts to strengthen the Alliance presence through NATO.” Responding to a challenging geopolitical environment, Canada has committed a generational investment to modernize the North American Aerospace Defense Command (NORAD), with supporting infrastructure built throughout the Canadian North. NORAD is the binational command responsible for the aerospace warning and control and maritime warning of Canada and the continental United States, representing North America’s first line of defense and NATO’s northwestern flank.

NORAD is postured to deter, detect, and defeat threats through the North American Arctic from 10 to 2 O’clock. The 2 O’clock is focused on the Greenland-Iceland-UK (GIUK) gap, which serves as a chokepoint for Russian submarines and air/sea-launched cruise missiles targeting North America. JFC Norfolk and Arctic Sentry recognize protecting the sea lanes of communication and linking operations. To combat air and maritime threats at the 2 O’clock, NORAD already partners with Denmark and Greenland. However, a more demanding operating environment requires greater collaboration between North American and Nordic partners to share early-warning information for domain awareness, increase operational tempo, and achieve more fulsome collaboration; this means that NORAD and NATO are exploring efficient ways to work together to collectively defend NATO territory. This paper will explore the historical impetus for NORAD, recent Arctic policy developments in Canada and NATO, and provide recommendations to deepen collaboration on NATO’s northwestern flank.

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Northern Intelligence: Post-Secondary Education, Community Capacity, and What Arctic Security Needs to Learn

Arctic security conversations are accelerating — driven by geopolitical tension, sovereignty assertions, and the militarization of northern infrastructure. Recently, Jennifer Spence of the Harvard Kennedy School insisted that while the “Arctic is not outside geopolitics, it should now be reduced to geopolitics. The hazard is real. The intelligence frameworks guiding these big conversations have been slow to reckon with what is already on the ground: Indigenous governance structures,

community infrastructure with no redundancy, and the place-based knowledge held by peoples who have sustained life in the circumpolar North across generations. When hospitals, airstrips, and communications hubs become dual-use assets, they become potential targets — and in small northern communities, those are often the only such assets that exist. Security imagined as a layer above civilian life is no longer a viable model, if it ever was.

I propose that northern post-secondary institutions — universities rooted in and accountable to their northern contexts — represent an underrecognized site of the intelligence Arctic security actually requires. Drawing on the experience of Yukon University, Canada’s only northern university, and considering the longer history of circumpolar education through UArctic and its members, and its programs, including Circumpolar Studies and the late Northern Research Forum, I trace institutional drift: from establishing a region, building the capacity of northern peoples to understand and act on their own circumstances, toward producing knowledge about the North for external consumption. That drift matters in the current moment.

The recently launched Bachelor of Interdisciplinary Studies at Yukon University offers an example of a concrete response — a degree deliberately designed to place Indigenous and western knowledge on equal intellectual footing, to cultivate adaptable, place-grounded graduates with the skills to participate in and lead the complex conversations their communities face. From Sápmi to the Yukon, the circumpolar world has been trying to build this kind of intelligence for twenty-five years. Arctic security needs to catch up.

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Arctic Narratives in Global Media from 2016 to 2026

Interest in the Arctic is surging in the global media. Just a decade ago, the region was largely overlooked in major news coverage in both traditional and new media. When mentioned, the Arctic was most often associated with global warming, but its role was often limited to being portrayed as a victim of warming. Another common practice was to position the Arctic as an eccentric curiosity.

One major turning point came during Donald Trump’s first term, when he highlighted Greenland’s strategic importance and even considered its annexation. Media and public interest in the region grew afterward, though the Arctic still received far less attention than regions like the Middle East. Russia’s 2022 invasion of Ukraine and the subsequent NATO accession of Sweden and Finland brought the Arctic into broader hard security debates. The Greenland crisis of 2025/2026 further accelerated this shift. Within less than a decade, the Arctic moved from a niche topic to a mainstream one, with this surge in attention significantly affecting the region’s communities, politics, economy, and culture.

Since the Arctic is rarely discussed, we face an information crisis marked by an overwhelming flood of low-quality or misleading content. Much of it relies on assumptions rather than analysis or genuine knowledge of the region. The dominant rhetoric is shaped by geopolitical clichés such as “great power

rivalry” or “scramble for the Arctic,” which, while partly accurate, largely ignore the perspectives and realities of Arctic communities.

My article aims to trace the narrative surrounding the Arctic in key media outlets over the past decade. I will address the following questions: How often did the topic of the Arctic appear in the media outlets under study?

In what contexts was the Arctic discussed?

How has the narrative about the Arctic changed in the key media outlets over the years?

Who talks about the Arctic (creates narratives)?

The article will be based on comparative and quantitative methods. For this study, I will examine several key media outlets (both online and traditional) from the United States, United Kingdom, China, Germany, Russia, Arabian Peninsula, and India.

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Motto: If to defend your father land is called patriotic, to protect the Mother Earth (Gaia) should be interpreted as patriotic, too!

Recent pictures of total destruction – in Gaza, Iran, Lebanon, Sudan, Ukraine – are horrifying, shocking, and a blunt reminder of the crudity of war, when even schools, hospitals, tent shelters are being bombarded – is this defense, and if whose defense anyway? In addition of killing people and causing destruction, each exploded bomb and warhead, as well as the fighter jet, missile, drone, ship or other war machine carrying it, has direct impacts by polluting land, air and waters, causing CO2 emissions, and shaking geologically the earth’s topography. Further, energy, natural resources (minerals, water) and intellectual resources are being used in their production, which correspondingly pollutes and causes CO2 emissions, in peace time. After the Cold War, great powers, have fought several (neo-colonial / neo-imperialist) wars (the term not always used!), the USA more than 100 ones without being punished - for to terminate terrorism, make a regime change, to grab land & resources – yet, none for national survival.

The presentation argues that this, together with ‘no exit strategy’, makes them political or tactical, not strategic. Unlike, the struggle of the Palestinians for survival under massive bombardments by Israel, as well as the closure of the Strait of Hormuz by Iran, is very strategic. Similarly, to cause total destruction by the military is not a strategy, as it nullifies climate change mitigation objectives. Further, that this makes ‘military security’ – fostering fear, insecurity, and destruction by the military – a modern version of the ‘scorched earth policy’, and a sort of ‘substitute’ for environmental protection and mitigation. Unlike, ‘environmental / human security’, meaning security based on non-military means and confidence-building, is very strategic by trying to preserve and maintain the Planet as habitable. Finally, the presentation proposes that the long-range and sustained action could be started by eliminating the military as harmful for the Mother Earth.

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Mapping Arctic Intelligence: Sámi Knowledge, EU Governance, and Participation in Motion

What does “intelligence” mean in Arctic governance, and who gets to define it? While current debates often narrow intelligence down to AI, data infrastructures, or geopolitical surveillance, my research shows a much broader and more contested landscape. In the Arctic, and in our case, in Sápmi, different forms of intelligence, such as strategic, technological, ecological, legal, and Indigenous knowledge systems, coexist and interact. These are not neutral or separate layers, they actively shape how governance is practiced through EU policy, land-use planning, environmental regulation, infrastructure development, and participation frameworks.

In my doctoral research on Sámi institutional engagement with EU Arctic policy, I look at how Sámi actors operate within governance systems that increasingly emphasize inclusion, dialogue, and sustainability, yet still reproduce uneven power relations in decision-making. I am particularly interested in how “participation” is structured: whether it leads to meaningful influence or whether it remains largely procedural, offering recognition without a sufficient level of authority. My analysis focuses on three interconnected dimensions of EU–Sámi relations: participation and institutional navigation, green transition and resource governance, and cultural and linguistic regeneration. Across these areas, I explore a central tension: EU climate and sustainability ambitions, namely renewable energy expansion and critical raw materials strategies, often intersect directly with Sámi land use, cultural continuity, and Indigenous self-determination in ways that produce both opportunities and conflict.

Rather than framing Sámi institutions as passive stakeholders, I approach them as strategic actors. My work aims to show how they actively navigate, adapt to, and reshape governance spaces through hybrid institutional practices and transnational engagement across scales, from Brussels to Sápmi. Methodologically, I draw on qualitative policy analysis, Indigenous Institutional Theory, and Environmental Justice frameworks to examine how authority and knowledge are produced and negotiated across these overlapping governance systems.

In the spirit of the Calotte Academy’s participatory approach, I plan to include a short collective exercise - The Arctic Intelligence Map - inviting participants to reflect on how different forms of intelligence (policy-based, technological, and Indigenous) are recognized, valued, and mobilized in shaping Arctic futures. Overall, my argument is that the Arctic is not facing a shortage of intelligence. Instead, what is at stake is a struggle over recognition: which knowledge is legitimized, which are sidelined, and whose understanding of the Arctic is ultimately allowed to shape governance outcomes.

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Intelligence for Sustainability? AI, Data Governance, and Epistemic Power in the Arctic Region

The growing prominence of “intelligence” in contemporary governance - particularly through artificial intelligence (AI), data infrastructures, and strategic foresight - raises critical questions for Arctic sustainability and climate action. This paper conceptualizes intelligence not only as computational capacity or security practice, but as a political and epistemic process through which knowledge is produced, legitimized, and mobilized across scales and geographies.

Drawing on ongoing PhD research at Imperial College London on digital innovation for sustainable development in Arctic climate extreme settings, the paper examines how AI-enabled systems are reshaping environmental monitoring, climate governance, and decision-making in the region. It focuses on three interrelated dynamics. First, it explores how technologies such as GeoAI, satellite data, and predictive analytics are transforming the production of environmental knowledge, often privileging data-driven and technocratic forms of intelligence. Second, it critically assesses the risks of “information extractivism,” whereby Arctic data is collected, controlled, and operationalized by external actors, raising concerns about data ownership, digital sovereignty, and equitable benefit-sharing. Third, it interrogates the paradox between AI’s promise for sustainable development and the increasing material and energy demands of digital infrastructures.

The paper situates these developments within broader tensions between scientific, policy, and Indigenous knowledge systems, asking how different forms of intelligence are recognized, integrated, or marginalized in Arctic governance frameworks. Methodologically, it adopts an interdisciplinary approach combining science and technology studies, political geography, and sustainability governance, informed by engagement at the science–policy interface.

It argues that intelligence in the Arctic must be understood as relational, contested, and embedded in questions of power, justice, and sustainability. The paper contributes to interdisciplinary dialogue on how competing forms of intelligence-technological, political, and Indigenous knowledge can be brought into more equitable and sustainable Arctic development governance frameworks.

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Governing the Invisible: Legal Frameworks for AI-Driven Environmental Monitoring in the Arctic

The Arctic is increasingly monitored not by human observers but by algorithmic systems. Satellite-fed machine learning models, autonomous sensors, and AI-driven data platforms now track ice melt, permafrost degradation, and biodiversity shifts in near real-time. While this technological turn promises unprecedented environmental insight, it raises a set of underexplored legal and governance questions: Who owns the data these systems produce? Who is accountable when algorithmic assessments inform, or displace, policy decisions? And how do existing international legal frameworks cope with forms of environmental “intelligence” that are automated, opaque, and often privately owned?

This paper will approach AI-driven environmental monitoring in the Arctic as a legal governance challenge at the intersection of environmental law, data sovereignty, and emerging technology regulation. It argues that current frameworks, including the UNCLOS regime, the Arctic Council’s working group structures, and nascent national AI strategies, are ill-equipped to address the technocratic authority that AI systems are quietly acquiring in Arctic environmental governance. As these systems increasingly mediate the relationship between raw environmental data and political decision-making, questions of legitimacy, transparency, and accountability become urgent.

Drawing on legal theory and comparative analysis of existing regulatory gaps, the paper proposes a conceptual framework for evaluating how AI-generated environmental intelligence should be governed in the Arctic context. It pays particular attention to the tension between the efficiency gains AI monitoring offers, especially relevant to climate adaptation, and the risks of concentrating epistemic power in a small number of state and corporate actors, potentially at the expense of Indigenous knowledge systems and local communities.

The paper ultimately contends that governing AI in Arctic environmental monitoring is not merely a technical or ethical issue, but a matter of legal legitimacy and epistemic justice, of who is authorised to narrate the changing Arctic and to bear responsibility for its misreading.

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Post-anthropocentric empathy – bodies resonating in permeability

Other forms of intelligence

Of communication

Come to realise

How limited humans are

Could we listen if we wanted?

Relearn symbiosis

Fungi secrets teach me

Interdependency

Through aesthetic research
Musical embodiment
Lending my voice, imagining
What you would say, mycelium
What do we need to hear?
Post-anthropocentric empathy
Bodies resonating
In permeability

Through the mycelium-network spreading in every direction, fungi and plants are connected, exchanging nutrients and information. Fungi are very good at adapting to their environment - constantly evolving, feeding and eating in symbiosis, communicating, connecting, enabling exchange, decentralized beings - it seems like they possess an entirely different form of intelligence. There is a lot we could learn from them facing the escalating climate crisis and outbreaking wars, total disconnection amongst humans, as well as between humans and the environment. We are in need of a paradigm shift of what living together means.

We are inseparable from our environment. Through the food that we eat, the air that we breathe, the fungi and bacteria in our bodies and on our skin: We are completely permeable, we are walking symbioses. This interdependence between all stakeholders of the biosphere urges us to approach future projects with a post-anthropocentric mindset. We need to get over our superiority complex and observe what surrounds us. Unfortunately, we cannot simply start talking to a tree and expect it to talk back. Taking off our human-glasses, our expectation of what intelligence looks and sounds like, we find it everywhere.

In the artistic sound project Mycelium, through aesthetic research, automatic writing, music and embodiment, I imagine what fungi would say if they used human language and musical harmony to communicate, in hopes of raising awareness of our dependency, the interconnectedness of the biosphere, between life and non-life. I use music as a connecting medium for it is both rooted in physics, natural laws, and at the same time understood as something deeply human. Musical harmony is sound waves resonating. How does resonance affect our bodies? Our collective body? In resonance we connect. Can it teach us to take care?

<https://tinyurl.com/ytxmxvem> - link to listen to Mycelium

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Circumpolar Education and the Challenges of New (Geo)political Paradigms

For nearly twenty-five years, UArctic and other circumpolar educational networks have advanced a regional model of research and learning grounded in a shared vision of Arctic cooperation. The spatial logic of AMAP's cartographic frameworks, with their layered and intersecting regional boundaries, long served as evidence of a coherent circumpolar space defined by continuity, common challenges, and mutually relevant research questions.

But what becomes of this idea of a circumpolar region—held together by scholarly collaboration and shared educational priorities—when the foundations of cooperation begin to fracture under the pressure of geopolitical tensions and domestic political shifts?

This presentation examines the emerging consequences for Circumpolar Studies and considers potential strategies for developing new forms of regional knowledge that respond to shifting conceptual and political paradigms.

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The Closing of the Academic Mind: Populism, Securitization, and the Erosion of University Autonomy in Western Democracies

Right-wing populism and the deliberate securitization of knowledge are eroding academic freedom across Western democracies, including Finland. The Trump administration's weaponization of federal funding against ideologically disfavored universities has normalized state interference in scholarship, a trend echoed in Europe through nationalist politics and austerity-driven research agendas. As critical fields are reframed as threats to national cohesion, the distance between Western academic governance and Chinese-style political control of knowledge production is narrowing in ways that would have been unthinkable a decade ago. This paper argues that what appears as scattered policy disputes is in fact a coherent project to subordinate academic autonomy to political will — and that the West risks abandoning the very institutional freedoms it long held up as a point of distinction from authoritarian states.

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Operational Intelligence in the Polar Regions: Bridging Policy, Risk, and Cooperation Across the Arctic, Antarctic, and wider Cryosphere

This research explores how operational knowledge and practitioner-level experience contribute to “polar intelligence” and influence governance, cooperation, and risk management across the Arctic, Antarctic, and broader cryosphere. While formal diplomatic and policy mechanisms play an important role in shaping polar governance, much of the practical knowledge that informs decision-making emerges from operational collaboration among scientists, logistics personnel, Indigenous communities, policymakers, and industry partners. This project examines how operational intelligence is generated, shared, and applied, and how it can support more resilient and cooperative governance across cryospheric environments.

The Calotte Academy provides a unique opportunity to examine these dynamics across multiple geographic and institutional contexts. Through engagement with regional stakeholders, policymakers, researchers, and practitioners across Sápmi and the European Arctic, this research will explore how operational knowledge is transmitted between local, regional, national, and international decision-makers. Particular attention will be given to how operational cooperation can serve as both a practical mechanism for achieving policy objectives and a forum for information exchange in environments characterized by uncertainty, environmental change, and geopolitical complexity.

Drawing on a practitioner-scholar approach informed by experience in both polar regions, this research also incorporates comparative insights from the Antarctic, where operational cooperation has historically supported stability and scientific collaboration despite geopolitical tensions. By comparing governance structures and operational practices across the Arctic and Antarctic, and considering their relevance to broader cryospheric environments, this work seeks to identify lessons for improving coordination, enhancing resilience, and supporting cooperative security.

Ultimately, this research contributes to an emerging framework of Applied Polar and Cryosphere Risk and Governance, emphasizing the role of operational intelligence, economic considerations, and practitioner-level collaboration in shaping policy implementation. The project aims to generate insights that support more effective decision-making, strengthen cooperation, and improve risk management across the cryosphere in an increasingly complex strategic environment.

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Russia’s Foreign Policy priorities in the Arctic and the Implications for Canada and NATO

The Russian Arctic is home to its Northern Sea Route and the Kola Peninsula (host to Russia’s Northern Fleet), both of which are critical to Russian security and defense , its global power projection, energy dominance, and overall economic security. Consequently, Russia has increasingly invested in Arctic military and economic security. This presentation will outline Russia’s Arctic priorities and activities and discuss what motivates them from the perspective of how they align with its overarching foreign policy goals. A central component to Russian foreign policy is how it frames its national interests in the context of adversity with the West, and so this presentation will discuss this framing (the story Russia tells itself and the world about its interests), and what this narrative

means for NATO's Arctic states as they respond to Russian activities in the Arctic. Long considered immune from the realities of geopolitics, the Arctic is exceptional no more and Russia's relations with its neighbors in the region have shifted considerably. Russia's invasion of Ukraine, the adversarial relationship with NATO, and Russian "grey zone" or hybrid warfare tactics in the Arctic, are both drivers and consequences of this shift. It is in this context of adversity that Russia's prioritization of its Arctic Zone of the Russian Federation (AZRF) is interpreted. This presentation will attempt to unpack the motivations of Russian efforts to exercise its sovereign rights in the AZRF as a pillar of its social and economic development, as outlined in its Strategy of Development of the Arctic Zone of the Russian Federation and the Provision of National Security for the Period to 2035. On the one hand, Russian foreign policy documents frame the importance of preserving the Arctic as a "zone of peace," but its posturing in the region prioritizes ambiguity. This presentation will address what this means for Canada and its NATO allies as they navigate this ambiguity.

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Extracting the Emptiness: EU Space Law and Earth-Space Extractivism at the "Polar Gateway to Space"?

This ongoing study contributes to the critical legal scholarship on Arctic and cosmic extractivisms. Firstly, it introduces the concept of 'terrestrial extractivism for space purposes' (TESP) to highlight how space activities are used to justify land exploitation — a form of 'spacewashing' (Persaud et al., 2026). The Esrange Space Centre in Kiruna, Sweden, framed as "Europe's polar gateway to space," exemplifies this dynamic. Esrange's planned orbital launch capability is increasingly discussed as a contributor to Europe's autonomous access to polar and sun-synchronous orbits, which are important for Earth-observation and security-relevant monitoring missions.

This raises questions about how the production of strategic knowledge about the Arctic depends upon terrestrial infrastructures situated on Indigenous lands. Land use laws in the region, since the Reindeer Grazing Act of 1886, have been criticised for enabling extractivism, including the construction of the area's supposed 'emptiness' as a resource (Sheehan, 2018; Sörlin, 1989). Archival records show Sámi concerns as early as 1961, during consultations about the planned rocket range, regarding tangible impacts on Sámi lifeworlds and reindeer wellbeing.

In this context, this study examines the 2025 EU Space Act Proposal through the Historically Inflected Jurisprudence method (Pahuja & Storr, 2017) to clarify to what extent the Proposal fits in the historical trajectory of TESP in the Arctic. Although the Proposal includes a sustainability pillar requiring operators to quantify and reduce environmental impacts, it does not appear to contain specific provisions addressing noise impacts on reindeer husbandry, land-access conflicts, or Indigenous rights. A historically grounded analysis of the Proposal can clarify how EU space law

reproduces or departs from established patterns of TESP, and what reforms may be needed to ensure that space infrastructures evolve in ways that respect Arctic ecologies and Sámi communities.

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Competing Forms of Intelligence in Arctic Resource Governance: Indigenous Rights and State Policy Rationalities

In a governance context, intelligence refers to human-driven cognitive and institutional capacities, including judgment, ethical reasoning, and contextual understanding. In Arctic resource governance, this understanding of intelligence shapes how land, resources, and development priorities are interpreted, evaluated, and regulated. Competing forms of intelligence emerge where state policy rationalities grounded in legal-bureaucratic and extractive logics intersect with Indigenous knowledge systems rooted in relational land ethics, long-term stewardship, and collective decision-making.

Against this backdrop, Arctic resource management remains a critical and contested arena in which the interests of states, corporations, and Indigenous communities frequently collide. The region's vast mineral, oil, and gas reserves have attracted extensive state-led development, often at the expense of Indigenous rights, environmental sustainability, and cultural continuity. This paper explores the ongoing tensions in Arctic resource governance by examining Indigenous-state conflicts across the circumpolar region and beyond through the lens of governance intelligence. In doing so, it addresses a gap in existing literature, where limited attention has been given to understanding Arctic resource conflicts as interactions between competing forms of governance intelligence. Using a literature-based approach, it identifies and analyzes the structural challenges underlying these disputes, including legal and political exclusion, conflicting economic priorities, and cultural misunderstandings. Through real-world case studies, the paper highlights patterns of marginalization and resistance, while also pointing to emerging models of co-management and Indigenous governance. Drawing on these insights, the paper offers policy recommendations aimed at strengthening governance intelligence through more equitable and sustainable frameworks grounded in Indigenous sovereignty, legal recognition, and meaningful participation.

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Sámi communities in the European Arctic: navigating tensions between state-dependent governance and Indigenous self-determination in resource management decisions

This paper would examine how Sámi communities across Norway, Sweden, and Finland negotiate the structural tension between state-dependent governance frameworks and Indigenous self-determination in the context of resource management. Drawing on legal pluralism and political ecology, I would hope to argue that existing Arctic governance arrangements, shaped by Nordic welfare state structures, EU environmental policy, and international Indigenous rights instruments such as ILO Convention No. 169, produce a form of constrained autonomy in which Sámi participation is formally recognized yet substantively circumscribed. Through the comparison of two resource domains, reindeer herding and mineral extraction, the paper would trace how Sámi communities contest, adapt to, and strategically engage with state institutions to assert territorial and environmental claims. It would pay particular attention to the role of Sámi Parliaments as ambivalent sites of governance: institutions that simultaneously enable Indigenous voice, while reproduce state authority and limiting the reach of these indigenous voices. The paper would further explore how Indigenous ecological knowledge and relational understandings of land are mobilized, and often marginalized, within technocratic resource management frameworks and discourses. This paper would hope to contribute to emerging debates on decolonizing Arctic governance and offer a critical perspective on the limits of recognition-based approaches to Indigenous self-determination.

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Plural Arctic Intelligences: Ethical AI, Indigenous Knowledge, and Emerging Climate Governance Futures

Climate change is accelerating environmental transformation across the Arctic, intensifying geopolitical tensions and reshaping how intelligence - scientific, technological, Indigenous, and political - is produced and mobilized. As AI-driven tools become central to environmental monitoring and climate risk assessment, they introduce new forms of algorithmic intelligence into an already complex landscape of knowledge systems. Yet most AI climate models depend on satellite imagery and scientific datasets, often excluding or undervaluing Indigenous and local knowledge traditions

that hold deep temporal, relational, and place-based insight into environmental change. This emerging asymmetry contributes to broader crises of intelligence - crises of interpretation, legitimacy, epistemic authority, and community trust. This research area seeks to explore how AI-enabled climate intelligence can evolve in ways that acknowledge multiple epistemologies rather than displace them, and how Arctic communities can retain agency, sovereignty, and interpretive power as digital systems increasingly mediate environmental knowledge. Positioned at the intersection of responsible AI, knowledge justice and community epistemologies, including Indigenous studies, environmental governance, and science and technology studies, the project investigates the political, ethical, and epistemological challenges that arise as algorithmic systems become embedded in Arctic decision-making. The central guiding question is: How can AI systems for climate risk modelling and decision support in the Arctic be designed and governed so that Indigenous and local knowledge is meaningfully integrated, while ensuring transparency, fairness, and community-led control over data and interpretations of environmental change? By focusing on the interplay between algorithmic, Indigenous, ecological, and geopolitical intelligences, this emerging research aims to contribute to Calotte Academy's broader inquiry into how intelligence is defined, contested, weaponized, and reimagined in times of climate urgency and global disorder.

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“Scientific Information”: Is it losing sight in the Arctic Geopolitics?

The Arctic is warming at four times the global average, yet the scientific cooperation required to monitor this shift is currently paralyzed. In the wake of the Russia-Ukraine war, regional strategic competition—driven by narratives of national security and territorial sovereignty—has sidelined and overshadowed the scientific validity of critical environmental warnings. The suspension of scientific engagement with Russia, which encompasses over 50 percent of the Arctic landmass, has created significant data voids. These ‘knowledge gaps’ provide fertile ground for speculative assessments and misinformed governance decisions. The limited functioning of the Arctic Council has marginalized non-Arctic stakeholders, further fragmenting the production of global climate knowledge. Two critical aspects that further complicate the pursuits of scientific information in the region are: the use of “science as a cover” by states for hybrid operations and intelligence gathering activities; and states’ perception and view about even legitimate scientific research, through the lens of intelligence and espionage activities rather than the public good. Apart from the traditional East-West power rivalry, the Arctic is also witnessing emerging rifts and strategic re-alignments even between traditional allies. The shifting U.S. approach toward Greenland—driven by an intent to dominate spaces of high strategic and economic potential—has further prioritized traditional “hard security” over non-traditional, collaborative contexts.

This paper argues that the Arctic is facing a crisis of epistemic fragmentation of scientific information which would challenge future decision-making. Unless cooperation over scientific research (that

remain essential for providing science based intelligence/information/knowledge) is decoupled from geopolitical rivalries in the region, the expanding voids in it would leave the global community ill-equipped to manage the catastrophic transitions originating from the High North.

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Skolt Sámi Experiences of Security in a Time of Geopolitical Uncertainty

This research is based on my master's thesis, completed in September 2025 as part of my Master's studies in Arctic World Politics at the University of Lapland. It examines how Skolt Sámi people experience security in the current situation, particularly after Russia's full-scale invasion of Ukraine in 2022 and the closure of the Finnish–Russian border.

The study is based on eight semi-structured interviews conducted in Inari, Finland. Through these interviews, I explore how Skolt Sámi people understand security and how recent geopolitical developments have affected their daily lives, sense of belonging, and community relations.

The findings show that security is understood in a broad way. It is not only about physical safety, but also about cultural continuity, livelihoods, and social relations. The closure of the eastern border has been experienced in different ways. On the one hand, it has increased a sense of safety. At the same time, it has limited connections across the border, including contacts between relatives and cultural networks. These experiences are also connected to emotions and everyday life — how the border feels in people's lives, not just how it functions politically.

More broadly, the research shows how global geopolitical changes can have local and personal impacts. In the case of the Skolt Sámi, these changes are directly connected to everyday life, identity, and concerns about the future.

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From Great Power Competition to Subaltern Geopolitics: A Systematic Literature Review of Agency in Arctic Geopolitics

Great power competition has both historically and recently dominated Arctic geopolitical analysis in the media, politics, government documents and even business talks, framing the region from a state-centric viewpoint where the actions of superpowers and international alliances control the regional discourse. While the Cold War era Arctic was dominated by great power competition between the

“West” and the “East”, the fall of the Iron Curtain resulted in a paradigm change: confrontation made way for cooperation, for example in the form of cooperative forums such as the Arctic Council. Various non-state Arctic stakeholders, such as Arctic Indigenous organizations, gained a more prominent voice. Yet these non-state actors are rarely treated as equal geopolitical voices in contemporary analyses of Arctic geopolitics, often seeing their agency simply as objects of state actions or pesky resistance to state interests. The classical viewpoint of state-centric geopolitics has been challenged prominently in the recent decades by critical geopolitical research, dismantling the idea of only states being notable geopolitical actors and expanding the ways geopolitics can be comprehended and studied. Implementing the theoretical framework of critical geopolitics, this paper focuses on academic articles from the past 26 years on Arctic geopolitics released in high-impact geopolitical/political geography and IR-oriented peer-reviewed journals. Using systematic literature review, the paper intends to find out how the representations of geopolitical agents and agency have evolved within academic circles and what research gaps there might still be in the study of geopolitical agency of non-state actors.

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Employee Participation as an Internal Participation System: An Inclusive Service Design Perspective on Hybrid Workplaces

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The rapid digitalization of work and the expansion of hybrid organizational environments are reshaping how employee participation unfolds across contemporary workplaces. In hybrid workplaces, employee participation increasingly takes place across multiple communication and interaction settings, where communication, coordination, and decision-making are carried out through both digital and in-person interactions. While these arrangements may expand opportunities for interaction, they can also make it more difficult to maintain continuity, visibility, and follow-through in participation processes across organizational contexts. Drawing on an inclusive service design perspective, this study examines employee participation across different organizational contexts in hybrid workplaces. Based on semi-structured interviews with 20 managers across four Finnish companies operating in hybrid work environments, employee participation was analyzed through four dimensions: access, voice, influence, and translation.

The findings suggest that participation in hybrid workplaces is shaped not only by opportunities for access and communication, but also by how employee input is connected, coordinated, and sustained across organizational contexts. While digital communication tools and multiple participation channels may expand opportunities for interaction, they do not necessarily strengthen the continuity of participation processes. Instead, participation may become fragmented as employee input moves

across different communication settings, organizational layers, and decision-making processes. By viewing employee participation as an internal participation system, the study highlights the importance of understanding participation as an ongoing organizational process rather than a series of isolated participation opportunities. From an inclusive service design perspective, supporting participation requires attention not only to access and expression, but also to continuity, visibility, and the translation of employee input into organizational action. These insights contribute to broader Northern and Arctic discussions on distributed work, digital mediation, and the governance of knowledge in geographically dispersed work environments.

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How is militarization experienced as a 'happy object' among military families in Rovaniemi?

The unlawful invasion on Ukraine by Russia on February 24th, 2022, sparked a change in the Finnish military discourse, which has led to significant 'sematic shifts' in the country's security and defense policies (Laine, 2025). Finland's accession to NATO in May 2023 emphasized these changes, with the additional layer of entering the Finnish Defense Force cooperation to its new collaborative partners across the world. This has in turn led to increased military activity, especially in Finnish Lapland. According to its recently published Arctic Foreign and Security Policy, Finland has a responsibility, as one of the eight Arctic states, to shape an Arctic foreign and security policy that provides opportunities and protects the local inhabitants (Ministry of Foreign Affairs of Finland, 2025). The aim of this research paper is to determine how militarization can be branded as a 'happy object' among military families in the Arctic region. The term, coined by Sara Ahmed (2010), is explained as a concept that envisions a promising future, while simultaneously promoting a strong sense of national identity and a sense of belonging (Ericson et al 2023, p. 498). Additionally, the paper aims to incorporate the critical approach, as a way to challenge the current Arctic narrative, which is often described as a vast, empty, and densely populated space covered by ice and inhabited by polar bears. Critical approaches allow us to recognize that there are many Arctics, the so-called Arctic plurality (Lindroth et al 2022, p.9). The critical study approach is beneficial in assessing the increased military activity in the Finnish Arctic region, because it can reveal new, unforeseen perspectives that can be advantageous for policy making and research in the future. Identifying and acknowledging blind spots is a productive method to ensure the sustainable future of the Arctic.

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Interdisciplinary perspectives on regional and global arctic intelligence

A few subarctic societal cases/issues, with some perhaps unexpected geo-economic security repercussions, will be briefly presented with slides and bullet points, for reflections on what is implied in the wide title of this presentation.

- Regional intelligence & collective memory versus globalism and international/Western “best practices”
- What “good” does the recent launching of a new/opportunistic course in “Sikkerhet og Beredskap” (Security and Preparedness) bring to Finnmark County in Norway and the citizens of its eastern borderland with Russia?
- What “good (feel-good nonsense)” does a local prohibition bring citizens of the border town of Kirkenes, issued by the town’s mayor, against the Russian Consulate to place flowers at the local WWII memorial at the annual anniversary of the liberation of Kirkenes from Nazi occupation by the Red Army in 1944?
- What point does the Norwegian on-line publication Barents Observer have in publicising that some employees at the Russian Consulate in Kirkenes have a background as servicemen of the FSB?
- Are borderlands a fair ground on which national security agencies should recruit informers and hunt for spies and naïve idiots in the service of the enemy
- Freedom of speech, research, intelligence exchange. Symmetry in discussing propaganda and patriotism
- Weaponizing research: When, throughout the history of science and technology, was research communities politically ordered or opportunistically going into hostile camps an efficient instrument of war/peace?
- Is the university a politically handy and low-cost arena for state sanction policies? Do such measures, imposed by the media or university leadership, risk to create political conformity of research and teaching?
- How decisive are institutional, regional or national social boycotts and intellectual sanctions, compared to economic and kinetic warfare as means to settle conflicts?
- Farfetched or eye-opening comparison: Euro Arctic & Euro African Regions: the town of Tarifa on the Strait of Gibraltar: how does border interaction get replaced by conventionally understood security, and as a result produces mindless university courses out of touch with history and intelligence?

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Shaping Arctic intelligence competences through expert and knowledge continuity and legacy at the edges of geopolitical transformations: FORAS project experience

Current state of science dialogue worldwide and in the Arctic in particular shows that such fragmentation, political interference and institutional transformations, require new approaches and new mechanisms to sustain knowledge sharing and continuity. Turbulence produces the perfect communicative gap which fosters the adaptive strategies and forces science community to find intelligence and smart ways to ensure the legacy of scientific knowledge and ways of thinking in absolutely new grounds backed at the influence of institutionally limiting external factors. Such a need for search results in new collectively effective and functional forms of international science communication. Even though the person-to-person communication is admitted as one of the real communicative strategy at present, the examples of collective gathering at the endorsement of global organizations produces the other level of possible interaction and integration. One such example is FORAS project endorsed by UNESCO's International Decade of Science and sustainable development. FORAS stands for "From the Arctic for the Arctic: science diplomacy for sustainable future of the region and its people".

A series of online sessions with scientists, experts, and residents of the Arctic region is organized within FORAS projects to discuss the most important development issues in the Arctic through the prism of science diplomacy, as well as scientific, expert, and local knowledge. Online sessions are organized on a regular basis. With this project the development of international and interregional dialogue among Arctic scientists, experts, and residents is promoted and facilitates the involvement of non-regional participants in the Arctic dialogue from the members of CIS, BRICS, SCO, and other countries. The geographical coverage of FORAS project is not limited to the Arctic only and extends beyond its limits which reduce the political attitude and burden towards the project and discussions and helps to mitigate risks and critical challenges which highlight the commonality of planetary values. It also in practice helps to avoid the effect of Arctic exceptionalism discourse.

To ensure the continuity of knowledge FORAS project team has developed the second phase of the project – FORAS2E (For Arctic Science to Education) which aims at organization of open online school (MOOC – Massive open online course with live sessions and discussions) for the young generation and early-career researchers from different geographies. This will help to create new intergenerational communication supported by continuity of knowledge and create a trustier background for future science communication to avoid the "lost generation" gap.

Both projects seek to bridge through science diplomacy the existing and currently widening gap in today's Arctic science, to facilitate and disseminate actionable scientific knowledge to local communities and practitioners to achieve sustainable development goals through global research collaborative initiatives and open science for a safe and prosperous future for everyone in the Arctic

and beyond. This second phase of the project is highlighting the significance and importance of the continuity of knowledge, science and education for the next generations of people and humankind.

As part of the project, the discussions on various topics related to the Arctic region and international cooperation in the Arctic will be organized. The online sessions will feature discussions on the International Decade of Science and sustainable development, the Decade of Ocean Science, and the International Polar Year. Sessions on “People of the Arctic,” “Arctic Biodiversity,” and others will take place according to the project’s plan.

Intermediate results of the project show that for 6 months of its implementation and within 6 organized sessions and 3 conference events, the project reached over 2500 people online and onsite. The topics covered during the project’s activities included UNESCO International Science Decade, Challenges of the Russian Arctic development in a changing world, Where the Arctic meets Africa, Rational Nature Management in the Arctic, Evolution of drifting measurement platforms for studying the Arctic Ocean, International Polar Year — 150 years of science empower at the poles, International Science Initiative in the Russian Arctic, Building the new science dialogue at the era of transformations.

The thorough observation of the project’s development and its results within the research framework can highlight the efficiency of such initiatives and activities for consideration of future dialogue strategies.

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Mukhrino field station as an extra-geographical intelligence hub: Why West-Siberian peatlands are indispensable for global climate monitoring

The global multi crisis we face today is not only geopolitical and ecological but also a crisis of intelligence – of information, sense making, and knowledge production. One of the most dangerous blind spots in contemporary Arctic and climate intelligence is the growing disconnection from Western Siberia – the site of the world’s largest peatland complex, which stores approximately 70 Pg of carbon. As Professor Gareth Rees of the University of Cambridge and his co authors have conclusively stated: “One cannot fully represent Arctic processes without understanding the Russian part of it” (Büntgen & Rees, 2023; see also Rees et al., 2024). Excluding Siberian data from global models does not reduce uncertainty – it amplifies it.

Since 2009, the Mukhrino field station (Western Siberia, Yugra State University, Russia) has operated as a scientific hub – a place where knowledge is produced through long term commitment to environmental monitoring, methodological innovation, and open data. Here, here is maintained one of the longest continuous eddy covariance records of CO₂ and CH₄ fluxes in the Eurasian boreal zone, coupled with high frequency hydrological monitoring, UAV based vegetation mapping, peat stratigraphy, and hydrochemical assessments, including dissolved organic carbon fluxes. This multi scale intelligence – from paleo reconstruction to real time fluxes – reveals that different peatland

microforms (ryam, ridge, hollow, pool) function as a complex ecosystem, each storing and releasing carbon and information at different rates and under different vulnerabilities. Moreover, this emphasizes the global role of West Siberian ecosystems and their involvement in planetary scale processes.

This intelligence is currently at risk. The isolation of Russian science from Western collaborative networks has created growing data gaps that directly undermine global climate predictions, especially for permafrost carbon feedbacks and methane budgets. Mukhrino is not just a Russian station – it is a shared infrastructure for planetary climate literacy. Restoring bridges to this region is not a political luxury but a scientific and humanitarian necessity.

The purpose is to demonstrate the practical forms of collective intelligence – from open data protocols to remote collaboration models – that can help the Arctic research community preserve knowledge continuity across geopolitical divides. Supporting extra geographical stations like Mukhrino is an act of intelligence in the deepest sense: recognizing where critical knowledge resides and defending the conditions for its production.

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Digital hegemony: The rise of techno-authoritarian neoliberalism as a challenge to human security in the European Arctic

Digital technologies have deeply penetrated everyday life, with digitalisation largely driven by capitalist logic that prioritises economic growth over human well-being. The economic imaginaries of the leading digital corporations—embodying a techno-authoritarian form of neoliberalism—fuel neoliberalisation trends that have led to a significant redistribution of power and wealth, both domestically and globally.

This paper examines how the promotion of the economic imaginaries behind techno-authoritarian neoliberalism and the associated “commercialisation of everything” challenges efforts to achieve sustainable livelihoods, using the human security framework. It discusses how mainstream digital services for everyday practises, including social media or artificial intelligence, favour the generation of profit and geopolitical dominance over social and ecological sustainability, as well as over community autonomy. The way how digital technologies are being adapted under prevailing digitalisation policies risks consolidating power in the hands of a transnational elite rather than serving local and community-level needs.

Arctic Yearbook

The Arctic Yearbook is intended to be the preeminent repository of critical analysis on the Arctic region, with a mandate to inform observers about the state of Arctic geopolitics and security. It is an international and interdisciplinary peer-reviewed open access publication, published online at <https://arcticyearbook.com> to ensure wide distribution and accessibility to a variety of stakeholders and observers.

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Calotte Academy 2026 Role Play Game material

The program of the Calotte Academy 2026 includes 4-5 rounds of Role Play Game on “Who owns Greenland in June 2026?” (see, The Background Context). The Role Play Game at Calotte Academy, third time in 2026, is based on the Role Play Game model designed by Professor Heininen for IR courses at University of Lapland.

The main aim of the Role Play Game is to simulate an international negotiation on Greenland in general, and in particular a negotiation situation, which can be peaceful or dynamic between relevant actors of the Arctic, not least between Greenland and Kingdom of Denmark, and the USA.

Among goals are first, to find out what kind of relationships there are between the main parties; second, how these relations are influenced by fear based on force, power (military, economic), authority, alliance, trust based on cooperation, knowledge; third, what kind of role Arctic stability and cooperation plays there; finally, to find and brainstorm better, if not best practices how, and by whom, to (re)build confidence between parties, and what would be potential first steps to start by.

About Simulation as a Method

Briefly speaking, ‘Simulation’ is to imitate a complicated situation or process for research, and applied further for expertise and best practices, to analyze different situations between human beings, even to solve problems.

Simulation “enables participants to experience negotiating an international issue... [and encourages] to balance theoretical and conceptual ideas... with the ‘real world’ expectations of foreign policy making” (Enterline & Jepsen 2009). It is within the framework of ‘Game theory’, as a method to examine, discuss and calculate (i.e. test how participants calculate), and based on that find out what kind of choices & decisions participants do in different circumstances. In the same way, as reality is never a closed system (due to in & outputs), after being started simulation, as well as a role play game, will follow its own rhythm and logic, and be open towards inputs from outside.

Among multiple objectives of simulation are: 1) to prepare participants (e.g. early-career researchers & students) to make deeper analyses, read and understand a nature, dynamics, rules & procedures of an international negotiation (situation), as well as difficulties & challenges of agreeing; 2) to increase participants’ knowledge and understanding on an issue area, in particular multi-dimensional & complex ones, as a part of world / global politics, as well as roles and interrelations of relevant actors; 3) to increase participants’ knowledge on interests, policies / strategies & objectives of international actors, and their interpretations of ‘power’ (based on military and/or economic strength) vis-a-vis ‘influence’ (based on knowledge, communication & diplomacy), as well as how interests could be combined even when actors disagree; 4) to prepare participants to assume & adopt policy-shaping & decision-making processes, and assume, adopt & train their leadership roles; 5) to train oral and rhetoric skills, i.e. how (first) to listen others and (then) argue on behalf of your points of view / opinions (based on knowledge & proper information), and how to convince others in an open discussion.

And finally, to adopt, and assist other participants to adopt, a ‘dialogue’ as a doable, even effective, method for confidence-building, if and when “the potential of dialogues” (Gadamer 1992; also Heininen 2023) is being materialized.

Simulation is, first of all, a process consisted of several rounds of a dialogue as steps like for example, firstly, to find out & examine, if there is patience and political will by parties for real discussions, and hence if a dialogue is achievable and valued – here “to agree that we disagree” is an achievement in the beginning; secondly, to brainstorm doable and effective ways & methods how to (re)build, and by whom, confidence between parties; thirdly, to define common interests, and potential steps how to reach them; and fourthly, to draft a memorandum of understanding or statement on the situation based on the discussions & negotiations.

Participants & Actors

Concerning the participation of the Role Play Game at CA 2026 we need a wide spectrum of key actors, and that all relevant Arctic actors, including actors from the main categories of international actors, will be represented. It would be ideal to have 2–3 actors from each category.

There is no official list of international actors, yet the following categories are mostly, also in the 2026 Role Play Game, included:

- States: e.g. Arctic states & their armies, Arctic Council Observer states
- Intergovernmental Organizations (IGOs): e.g. UN, UNCLOS, Nordic Council, Arctic Council, European Union, NATO
- Non-governmental Organizations (NGOs): e.g. WWF, GreenPeace, IASC
- Sub-national governments: e.g. Greenland, Nuuk, Nunavut, Inari Municipality
- Civil societies: e.g. Indigenous peoples’ organizations, scientific community
- Transnational Corporations (TNCs) & State-Owned Enterprises (SOEs): e.g. Gazprom, Equinor (Statoil), LKAB, UTAC, Big Tech

There will be a ‘chair’ with a technical mandate given by the Security Council of United Nations.

Role Play Game at CA 2026

The Role Play Game will start from the reality, i.e. the state of the Arctic in June 2026 (see, the Background Context). The reality will be discussed, debated and formulated, by the participants, into scenarios. This will be followed by the simulation, which will be started by imitation of real actors and their actions & reactions.

After a short presentation of each actor & its main interests by all participants (1st Round) the Game will create its own dynamics and go, most probably, beyond the reality. Then the participants are asked to follow the logic of the Game and act accordingly: On one hand, to defend your role and its interests and aims, and on the other, to be open-minded and innovative by reading the Game and its dynamic, as well as looking the main aim and goals of the Game, as well as objectives of simulation.

As mentioned, among the goals are to find out how and by what relations between the parties are influenced, and to brainstorm better, if not best, practices how to (re)build confidence between parties. An ultimate goal could be to search for a mutual understanding of the situation and a way out of the deadlock, which would maintain the geopolitical stability and cooperation (on environmental protec-

tion and climate change mitigation) in the Arctic. Nonetheless, an outcome could be an “agreement to disagree”, or bluntly a failure.

Planned Rounds

1st Round: Welcome & procedures of the Game, and short introductory presentations of the actors and their interests & policies by the participants (1-2 min); only technical questions on the procedure are allowed.

2nd Round: Discussion & formulation of scenarios for alternative futures, starting from a ‘best case’ scenario (Scenario A) to a ‘worst case’ scenario (Scenario D), and having in between ‘compromise cases’ (Scenario B, Scenario C) (more details later).

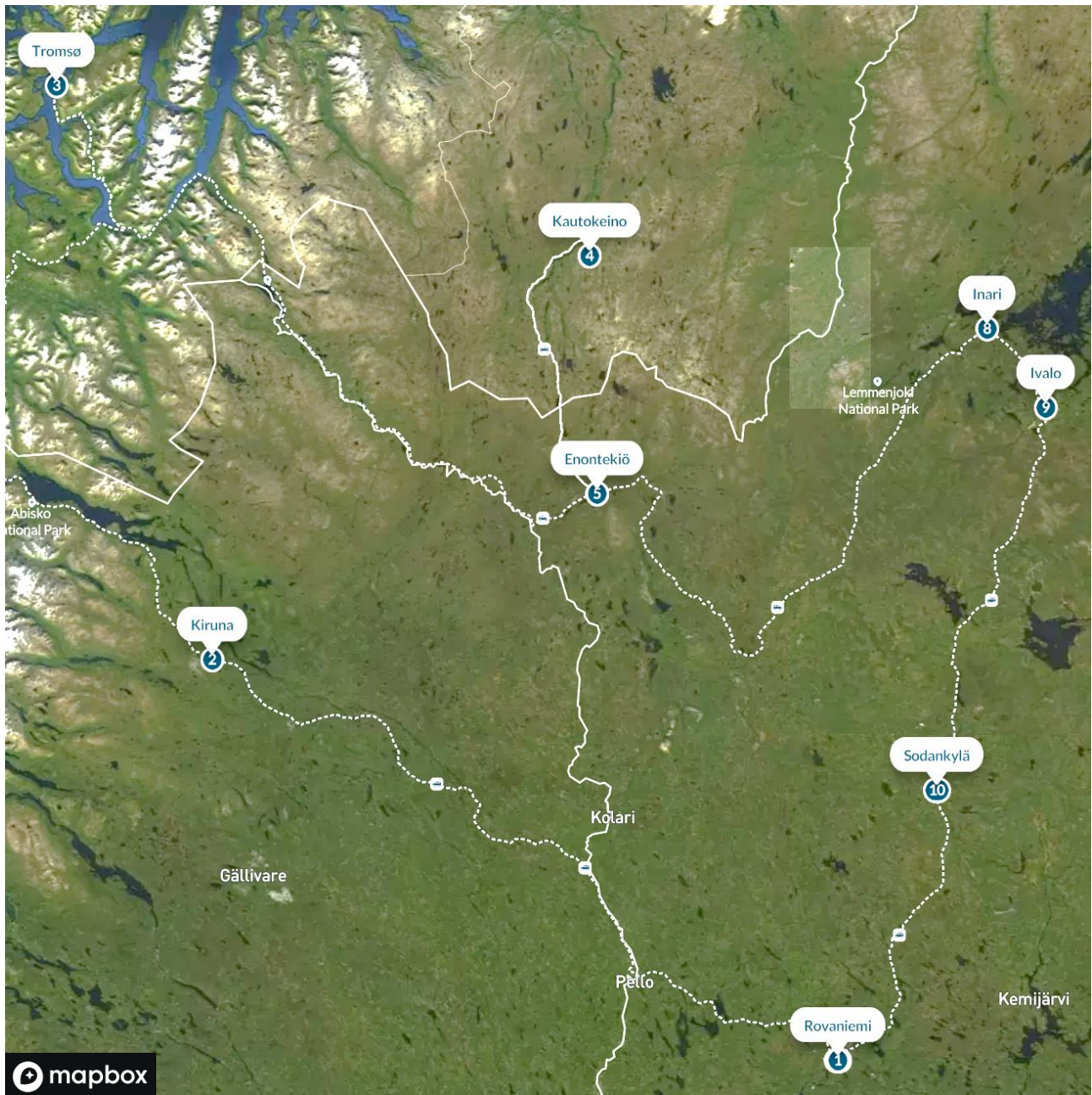
3rd Round: Presentations (a’ 2-3 min) of the actor on a state of the Arctic in general, and in particular concerning the Greenland issue; substantial questions & comments by others after each presentation are allowed, even expected.

4th Round: Brainstorming by participants, on behalf of the actors, on ways & steps how to (re)build confidence between parties; substantial questions & critical comments by others after each presentation are expected, even recommended.

Please, remember to be short and avoid long presentations. This is firstly, to guarantee that all participants / actors will have the floor, and second that we manage to go through the planned rounds. Finally, and importantly, to allocate time enough for a dialogue, the best precondition that “the potential of dialogues” will be materialized.

All in all, the Role Play Game is all about rhetoric, based on oral presentations, and simulation: The Arctic, including Greenland, consists of the card table; actors are the pieces (not pawns) played by you; Arctic governance, geopolitics and security consist of the frameworks and guidelines, and peaceful coexistence is the stake; and finally, oral presentations consist of the dice.

Route of Calotte Academy 2026



8–14 June 2026

Rovaniemi – Kiruna – Tromsø – Kautokeino – Hetta – Inari / Ivalo – Sodankylä

Polarsteps: <https://tinyurl.com/ca2026map>

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