

207. THE POLES, AN INTERDISCIPLINARY TOOL FOR ADVANCED TRAINING IN SCIENCE DIPLOMACY

Organized by: Department SPGI (Political Science Law and International Studies), University of Padua, Italy

Speakers:

- David Burigana, Professor, University of Padua, Italy: *The Italian Long March To Poles: An Operational History*
- Elena Calandri, Professor, University of Padua, Italy: *The Poles And The Italian Approach To European Construction In A Changing World*
- Alessandro Paccagnella, Professor, University of Padua, Italy: *Microelectronics and the Poles Geopolitics*
- Umberto Vattani, Ambassador, Venice International University, Italy: *Italian Diplomacy from Science to Poles*
- Rasmus Gjedssø Bertelsen, Professor, UiT - The Arctic University of Norway
- Federica Scarpa, Dr, IACN-Icelandic Arctic Cooperation Network

Description:

Our Session is configured as a round table of presentation, discussion, and networking around the research and advanced training methodology on Science Diplomacy, and the interconnections between science, technology and foreign policy, which we are using in a series of schools, courses and projects of international research coordinated by the University of Padua, and with repercussions on the Italian scenario. This is why we do not meet one of the required characteristics, the national and institutional diversification: D. Burigana (University of Padua) "The Italian long march to Poles: an operational history", E. Calandri (University of Padua) "The Poles and the Italian approach to European construction in a changing World", A. Paccagnella (University of Padua) "Microelectronics and the Poles Geopolitics", and as witness Ambassador Umberto Vattani (Venice International University), twice Secretary General of the Ministry of Foreign Affairs (1997-2001) and (2004-05), and Italian Permanent Representative at UE (2001-04), "Italian Diplomacy from Science to Poles". We will have as discussant a colleague who has worked with us for some time, an expert in Arctic geopolitics and Science Diplomacy, Rasmus Gjedssø Bertelsen, Professor of Northern Studies, Barents Chair in Politics (University of Tromsø), and an interdisciplinary researcher Federica Scarpa (IACN-Icelandic Arctic Cooperation Network), both participated in our schools as speakers. Let's start from the Italian point of view, because our activities have contributed to the national reflection on Science Diplomacy, including the Poles, in particular to the interest in scientific diplomacy from 2022 within the Ministry of Foreign Affairs - with the passage of scientific and space attachés from 22 to more than 60 - and to the academy, with an annual meeting at the Venice International University (VIU), of which Ambassador Umberto Vattani is President, and the launch of an Italian inter-university observatory with the participation of foreign universities too on Space Diplomacy (spacediplomacy.it) followed by one on Science Diplomacy (sciencediplomacy.it). We follow a much more extensive and in-depth definition of Science Diplomacy compared to the initial phase

of its rediscovery (the Royal Society and AAAS reports, 2010), and on the reflections that include technology, national interest, techno-scientific cooperation by Pierre-Bruno Ruffini (Interview to Pierre Bruno Ruffini, Padova, 30 11 2021 - YouTube), author of the first volume on Science Diplomacy (Springer, 2017). It's a research and higher education methodology that we have been developing since 2017 thanks to an H2020 InsSciDE (Inventing a shared Science Diplomacy for Europe) directed by Pascal Griset Paris Sorbonne (New solutions to have science more involved in diplomacy - YouTube) on which two were grafted PRIN (Italian Research Project of National Interest financed by Italian Government) one PRIN 2017 (2019-24), dedicated to Italy's role in techno-scientific diplomacy from the 1960s to the end of the Cold War, and one PRIN 2022 (2024-26) on the search for strategic autonomy by the EU from the 1990s to the present day. We then had another research project funded by the Italian Government in 2021 FISR 2020 (2021-22) which aimed to test a pilot Masters in Science Diplomacy (brochure-ExPoSTID-springschool2022-ENmail.pdf (unipd.it)) aimed at researchers and scholars of STEAM disciplines, but focused on the interplay between experts/advisers in science and technology and political decision makers, a line of research started with the project ExPoST (Experts and Politicians on Science and Technology) funded by the University of Padua (2015-17) (Ch. Bouneau, D. Burigana, Experts and Expertise in Science and Technology in Europe since the 1960s. Organized civil Society, Democracy and Political Decision-making - Peter Lang Verlag, 2018). The goal of ExPoSTID (Experts and Politicians in Science and Technology Italian Diplomacy) was to create in the medium term an osmotic community between researchers in STEM and the human, political and social sciences in order to share the now essential need for those who work in science and technology to be interested in the evolution of the international context, and vice versa for those who carry out international studies . The belief is that science and technology are not a part of foreign policy, not one of the tools of prestige or affirmation of foreign policy, but essential tools for international dialogue in that continuous mediation between different national interests with a view to the solution to global challenges . Diplomacy can guarantee this mediation but with a multiplicity of actors - not only diplomats, politicians but experts/advisers in science and technology, primarily scientists - in dialogue with civil society, starting from the national level but acting in international arenas. Today we are at the third edition of the international School in Science Diplomacy (21-26 October 2024). Thanks to this experience, the Ettore Majorana Center for Science and Culture, founded by the physicist Antonino Zichichi in 1962 in Erice (Sicily), created a school in Science and Diplomacy, directed by D. Burigana, P. Griset and U. Vattani, with the CNR and the Italian Center for High Defense Studies (3-9 October 2024) with a dedicated platform sciencediplomacy.it. In both schools we will talk about the Arctic. Since the first edition in Padua (2022), one of the themes has been Antarctica and the Arctic. With the opening of the CNR Dirigibile Italia laboratory in 1997, but above all with the commitment to satellite observation with EGEOS, Italy consolidated its interest in the Arctic started with the National Plan for the Arctic. In Antarctica, since 1968 there has been a first pioneering expedition financed by ENI in search of energy sources, then taken up as a scientific expedition by the CNR. It is the beginning that leads to the creation of a National Plan for the Antarctic with scientists who will act as experts/consultants for the Minister of Foreign Affairs for Italian participation in the International Treaty on Antarctica. The 80s and 90s saw the deepening of Italian commitment in Antarctica, and in parallel the start with the Arctic for which, again in the 60s and 70s, there had been an interest albeit sporadic with explorers individual but connected

to the political world, and the creation of a national institute. However, it was necessary to wait for the new European framework with the end of the Cold War, the birth of the EU, the search for an autonomous role for Europe, hence participation in the Arctic Council. On both scenarios - North Pole / South Pole - there is an acceleration of innovation and the Space Economy in the Earth Observation and Communication sectors of the satellite branch of space activities, with Italy's excellent positioning with ESA, NASA and an increasingly extensive network of bilateral relations in a strengthened synergy between institutional research - Italian Space Agency, CNR, National Institute of Astrophysics, National Institute of Nuclear Physics - University, and SMEs no longer in the shadow of Leonardo/Finmeccanica. It's the 2000s.

The history and geopolitics of the Arctic must be included in the more general framework of Science Diplomacy not only because it is one of the notable examples, but for the multiplicity of disciplines and technological typologies it involves. Similarly, this is what happens for Space, the fourth dimension of human exploration, but as the Space Economy shows due to the dependence on satellites for innovation in communications and Earth Observation applications. It is no coincidence that the Poles are not only the object of experimentation and use of space activities. Due to their positioning, they hold two of the most strategic satellite data reception bases, as well as being a place of use and experimentation for the frontier of microelectronics. Just two examples we'll talk about. However, it is necessary to proceed with a truly interdisciplinary approach, that is, collaboration between techno-scientists and political scientists. The approach we start from is that of the history of the evolution of the international context and the positioning of Italy (D. Burigana, E. Calandri) but applying the concept of operational history to the Arctic and Antarctic, i.e. identifying in the past some elements - actors, dynamics - which can suggest trajectories on the present time. Interdisciplinarity is given by the relationship with fellow scientists, as in the case of Alessandro Paccagnella, physicist, world expert on the effect of radiation on chips, and with whom we have opened a course on Microelectronics and Globalization, and a Master's in Science, Technology and resource management in the international context where the geopolitical role of the Poles is addressed. However, a strong interaction is needed with the students who participate not in courses, but in learning laboratories because we apply with them - in the schools, in the Master, in the courses - a methodology continuously updating topics, and analyzes since it is based on a communicative interaction with students playing simulation and storytelling workshops. It is at this point that the participation of witnesses from the recent past and actors of the present time who show the dynamics of Science Diplomacy, such as Ambassador Umberto Vattani, becomes essential. In this framework, we have started an oral history project, opening two new series of interviews on Science and Space Diplomacy at the Historical Archives of EU (Florence, Italy), because they are specialized in archival and oral history funds on the history of European construction, not only of the EU institutions. They have the archives from the European Space Agency and the European Science Foundation for example. The students participate in carrying out the interviews. In the renewed attention to Science Diplomacy by the Minister of Foreign Affairs and International Cooperation with the transition from 22 to more than 60 scientific and space attachés, for the first time the attachés' conference was held outside the Ministry in a university, in Padua (2023), and at the Polytechnic of Turin (2024). In view of these two conferences, the Venice International University (VIU), a consortium of Italian and foreign universities, wanted by the President of the Republic Carlo

Azeglio Ciampi, and chaired by Ambassador Vattani, was the venue for two preparatory meetings with diplomats, academics, representatives of companies interested in Science Diplomacy from which the commitment to create two Observatories emerged, one on Science Diplomacy sciencediplomacy.it and one on Space Diplomacy spacediplomacy.it.

Frankly, what our Session can do for the Arctic is extremely minor, but what the Arctic can do for us is important. We would like to take advantage of our participation to activate a networking action to discuss our higher education methods, to extend, deepen and make permanent our research and training interest on the Poles, an essential theme of Science Diplomacy.

Logistically in 55 minutes, we would like to give space to our witness, and to the discussants, stimulating the public. For this reason, if selected, in agreement with the Organization, we would like to be able to open a page dedicated to our Session on the spacediplomacy.it web site currently in countdown but already equipped with a Space Diplomacy Italy YouTube channel to be able to share our texts and reflections, and receive any feedback well before the 2024 Arctic Circle Assembly. We will then stay for the entire duration, guaranteeing the presence of the three from the University of Padua and Ambassador Vattani because they are covered for travel, accommodation and registration fees by the 2017 and 2022 PRINs of which D. Burigana is head of the research unit. The discussants will already be present. We also want to pay video recording for our communication policy at university and department level, and on the spacediplomacy.it and sciencediplomacy.it sites.

141. LOOKING FORWARD: NEXT GENERATION SCIENCE DIPLOMATS

Organized by: UArctic Thematic Network on Science Diplomacy; Association for Polar Early Career Scientists (APECS)

Speakers:

- Pauloosie Jamesie (Pj) Akeeagok, Premier of Nunavut, Legislative Assembly of Nunavut, Canada*
- Dr Victoria Qutuuq Buschman, Environment and Climate Advisor, Inuit Circumpolar Council*
- Romina Pourmokhtari, Minister for Climate and the Environment, Government of Sweden, Sweden*
- Dr Susana Hancock, Science Manager, Arctic Basecamp, Netherlands; Science Diplomacy Thematic Network, UArctic, Finland
- Nicholas Parlato, PhD Student, Center for Arctic Policy Studies, University of Alaska Fairbanks, USA; Association for Polar Early Career Scientists (APECS), Netherlands
- Dr Zia Madani, JSPS Fellow, Polar Cooperation Research Centre, Kobe University, Japan

Description:

This 2024 Arctic Circle Assembly proposal builds upon the success of the 2023 session, Arctic Science Diplomacy: The Next Generation, which was one of the top ten attended sessions for the

conference. The success of this panel led to several articles by panelists and a new 'next generation' science diplomacy community. We aspire to build upon this momentum.

Leadership must always look forward. In order to look ahead, we need cross-generational representation that continually seeks to empower the rising generation(s). Too often, our politics, needs and tensions are myopic, driven by emotion. As young leaders, the present can feel so polarized that the future is hard to imagine. Yet, that is a future in which we must be prepared to lead.

This session brings together a diverse representation of individuals working in both domestic and international spaces of Arctic science/cultural diplomacy looking to develop the necessary governance mechanisms for both short and long-term sustainability. Through Indigenous leadership, transdisciplinary discourse and courage, young leaders are looking toward timescales and capacities throughout the circumpolar region that necessarily transcend individual nations.

Through a guided dialogue, we collectively pursue a multifaceted understanding of what diplomatic activity in the Arctic looks like, ask if the diplomatic demands of climate change are being met by current modes of engagement, and articulate what kind of futures and futurities “next-generation” diplomats actively create, especially as we look ahead toward the 5th International Polar Year.

This session aims to model a discursive space where common values and interests are identified and centered in the process of communicating and relationship-building. Recognizing that the current atmosphere of distrust, violence, and non-communication presages an extended discontinuity between complex geopolitical blocs, we want this dialogue to serve as a touchstone and a sober warning of the risks being permitted in the pursuit of nationalist and expansionist goals. Speaking for themselves and for young people around the world, session participants are invited to assert their future visions and wisdom from the periphery of Arctic power centers.