**Polar Science and climate change**

**Cooperation between Italian Institutions and the Arctic and Antarctic Institute**

**of the Russian Federation – Future perspectives**

Workshop (teleconference) 26 November 2021

10:30 – 14:30 (Moscow time)

**10:30 - Opening session.**

Welcome and Opening remarks H.E. Giorgio Starace - *Ambassador of Italy to the Russian Federation.*

Moderators and introductory speech: Prof. Enrico Brugnoli - Prof. Alexander Makarov

**10:50 – Overview of Italian Antarctic Scientific Programmes and Infrastructures**

Prof. Silvano Onofri – President of the Italian Antarctic Scientific Commission

**11:05 – Overview of Russian Antarctic Scientific Programmes and Infrastructures**

Dr. Alexander KLEPIKOV – Deputy Head of AARI, Head of Russian Antarctic Expedition

**11:20 Polar science and ecosystems – cooperation and perspectives for new collaborations**

* ***Cryosphere : Sea ice and Permafrost***

**11:20** - Tatiana ALEKSEEVA, AARI Scientist, head of Ice Navigation laboratory, Sea Ice Regime and Forecasts department - Sea ice thickness in the Arctic: techniques, data gathering and validation, data processing and analysis of sea ice thickness variability

11:35 Giacomo De Carolis, CNR-IREA scientist - Remote sensing observations of the marginal ice zone: a challenge for the estimation of sea ice thickness.

11:50 Olga Gavrichkova, CNR-IRET Scientist- Critical zone and Arctic land ecosystems (*title tbc*)

* ***Atmosphere and climate studies***

**12:05** - **12:05** - Ekaterina ZOTOVA, Alexander DRUGORUB, AARI scientists – Spatial and temporal variability of total cloud cover in Barents sea region and in the Svalbard area. Influence of cloudiness on downward fluxes of short-wave and long-wave radiation based on ground-based observations in 1985-2020

**12:20** - Carlo Barbante, CNR-ISP, Director of Institute – Paleoclimate reconstructions and the project BeyondEPICA (*title tbc*)

* ***Climate seasonal monitoring, status and needs – From Regional scale to International Initiatives***

12:35 - Vasily SMOLYANITSKY - AARI Scientist, head of WDC Sea Ice laboratory, Sea Ice Regime and Forecasts department - AARI functions and activities within the WMO ArcRCC – N and the way forward for for the AntRCC-N.

12:50 - Vito Vitale – CNR-ISP Scientist -Measurements of surface UV radiation and columnar ozone content in polar regions: Italian activities and opportunities for cooperation in Svalbard.

* ***Ocean ecosystems***

13:05 - Anna WESMAN, AARI Scientist - Features of the spread of microplastics in surface waters of the Barents, Kara and White Seas

13:20 - Stefano Aliani, CNR-ISMAR Scientists - Climate change and miscroplastics in the Arctic (title tbc)

13:35 - Anastasia TARASENKO, AARI Scientist - Physical oceanography in the Russian sector of the Arctic Ocean: seasonal and all year measurements.

13:50 - Manuel Bensi, INOGS Scientist – The Italian Marine observing systems in the Arctic - Svalbard

***14:05 - Round Table - Perspectives of collaboration: Antarctica, the Russian Arctic and Spitzbergen***

***14:25****-* ***Concluding remarks***