



PROGRAMME

24th January 2024

13.00 Arrival and registration of participants

14.00 Welcome and presentation of National PhD School in Polar Sciences
Carlo Barbante

Chairman: **Barbara Stenni**

14.20 **Carmine Robustelli** *The Arctic in the international relations and the Italian engagement*

14.40 **Fabio Trincardi** *Italian Arctic Research Programme*

15.00 Welcome by the Rector of Ca' Foscari University of Venice **Tiziana Lippiello**

15.15 Welcome from the General Director of the Higher Education Institutions of the Ministry of University and Research
Marcella Gargano

15.30 **Mauro Mazzola** *The Arctic Station Dirigibile Italia: research and logistics*

15.50 Coffee break and poster overview
16.20 **Giovanni Macelloni** *The Scientific Committee on Antarctic Research: an overview*

16.40 **Silvano Onofri** *PNRA - The Italian National Program of Antarctic Research*

17.00 **Rocco Ascione** *PNRA's expeditions in Antarctica: logistics and infrastructures*

17.20 **Franco Coren** *The Laura Bassi research vessel, characteristics and scientific potentials*

17.40 **Annamaria Fioretti** *The Antarctic Treaty System*

18.00 **Carlo Barbante** *Conclusion remarks*

25th January 2024

9.00 Welcome and description of the day's activities

Chairman: **Silvia Illuminati**
CURRICULUM Climate system

9.10 Introduction
Barbara Stenni (Ca' Foscari University of Venice)

9.20 Invited keynote
Florence Colleoni (OGS) *Antarctic ice sheet evolution: past, present and future*

10.05 1-slide presentation
1-slide presentation by the PhD students in the curriculum

CURRICULUM Biology, Ecology & Biodiversity

10.20 Introduction
Simonetta Corsolini (University of Siena)

10.30 Invited keynote
Laura Ghigliotti (CNR-IAS) *Marine life at the poles in a changing environment*

11.15 1-slide presentation
1-slide presentation by the PhD students in the curriculum

11.30 Poster overview and discussion

12.20 Light lunch and poster overview/discussion

Chairman: **Giorgio Budillon**
CURRICULUM Human Impacts

13.00 Introduction
Silvia Illuminati (University Politecnica Marche)

13.10 Invited keynote
Susan Bengston Nash (Griffith University) *The Antarctic Monitoring and Assessment Programme*

13.55 1-slide presentation
1-slide presentation by the PhD students in the curriculum

CURRICULUM Solid Earth

14.05 Introduction
Carlo Baroni (University of Pisa)

14.15 Invited keynote
Francesco Salvini (University Roma Tre) *Antarctic plate geodynamics and its impact on the global changes of our planet*

15.00 1-slide presentation
1-slide presentation by the PhD students in the curriculum

15.10 Coffee Break and Poster poster overview/discussion

Chairman: **Maria Federica Marcucci**
CURRICULUM Ocean and Cryosphere

15.55 Introduction
Giorgio Budillon (University Parthenope Naples)

16.05 Invited keynote
Alessandro Silvano (University of Southampton) *The global influence of ice-ocean interactions in Antarctica*

16.50 1-slide presentation
1-slide presentation by the PhD students in the curriculum

CURRICULUM Astronomy, Space & Earth Observation

17.00 Introduction
Federica Marcucci (INAF)

17.10 Invited keynote
Francesco Berrilli (University of Roma

Tor Vergata): *Polar Vantage Points: Unveiling Cosmic Mysteries from Earth's Extremes*

17.55 1-slide presentation
1-slide presentation by the PhD students in the curriculum

18.00 **Jessica Marzaro** *Communication and social media in polar sciences*

18.15 **Marianna D'Amico** *Association of Polar Early Career Scientists (APECS)*

26th January 2024

8.45 Welcome and description of the day's activities **Carlo Barbante**

Chairman: **Alessio Nogarotto**

8.55 **Artoni Claudio** *Optical and microphysical properties of mineral dust in snow*

9.15 **Calì Quaglia Filippo** *Aerosols and clouds affecting the radiation budget at Pituffik (Thule), northern Greenland - Insights on the installed and newly developed ground-based instruments at the Thule High Arctic Atmospheric Observatory (THAAO)*

9.35 **D'Amico Marianna** *Chemicals of Emerging Concern in the Polar Regions: Distribution, Sources, and Transport Processes*

9.55 **De Rovere Francesco** *Transition of Kongsfjorden climate from Arctic to Atlantic: water masses variability and atmospheric drivers*

10.15 Coffee break

10.45 Online connection with Concordia Base and Base Dirigibile Italia - moderator **Jessica Marzaro**

Chairman: **Filippo Calì Quaglia**

11.30 **Carlucci Luigi** *Analysis of the Barents Sea fish community in relation to climate change and possible effects on fishing grounds*

11.50 **Leo Patrick** *Antarctic microorganisms as model for the study of the potential life in extraterrestrial environments and for planetary protection*

12.10 **Mezzena Lona Beatrice** *Microbiome Profiling of Ice Cores from High-Elevation Alpine Glaciers*

12.30 **Tenti Martina** *Reconstruction of the post-LGM Antarctic Ice Sheet retreat in the western Ross Sea through geomorphological evidence detected on the seafloor*

12.50 **Alessio Nogarotto** *Understanding land-ocean connections and coastal sea ice dynamics in polar regions during the last 30000 years through a combination of marine and terrestrial biomarkers*

LIST OF POSTERS FROM DIN PHD STUDENTS

Posters will be on display and available throughout the whole Workshop

Curriculum Climate System

Enrico Biscaro *Climate regime shift on Svalbard: a case study for understanding the effects of future climate change in the mid latitudes*

Mbemba Conteh *Technological Innovation for Exploring a new method to measure stable water isotopes on ice cores*

Diego Fellin *Aerosol - cloud interaction in the Arctic climate system*

Mario Gallarate *Analysis and simulation of snow-related data in the Western Alps*

Simone Meroni *Impact of fire emissions and dust uplift on the Arctic atmosphere*

Giacomo Roversi *Clouds and precipitation characterization in Antarctica through in situ measurement and remote sensing from ground and satellite platforms*

Alessia Spezza *Climate change impacts on the Third Pole's cryosphere*

Curriculum Biology, Ecology & Biodiversity

Sara Brandoli *Tardigrades of Antarctica: biodiversity, phylogeography, and evolutionary history*

Jacopo Brusca *Climate change induced changes to functional microbial diversity in polar regions: functional alterations and implications for the management of the international climate crisis*

Andrea Carli *Modulation of biological responses in polar organisms to environmental multiple-stress*

Andrea Cattaneo *Antarctic microbial community: biodiversity and biotechnological potential*

Laura Marturano *Assessment of otolith variability and micro-litter pollution in Antarctic teleosts in relation to Ross Sea water circulation*

Carlotta Volterrani *Impacts of herbivores on Carbon and Nitrogen relationship in High Arctic tundra*

Kyle Raymond Field *Genomic basis for inferring the origin and evolution of Antarctic Collembola and their processes of adaptation: insights from collection samples*

Curriculum Human Impacts

Elena Casagrande *Black carbon, organic carbon and mineral dust content in the Arctic snowpack and ice and impact on the surface albedo and post depositional processes*

Eleonora Favaro *Airborne contaminants of emerging concern as tracers of human impact in alpine background sites*

Julia Gambetta Vienna *Multidisciplinary approaches to the study of emerging contaminants (ECs) in Antarctica*

Lorenzo Massi *Chemical characterization of atmospheric aerosols in Antarctica*

Caterina Monni *Arctic Nexus: Nuclear Sustainability, Geopolitics, and Indigenous Adaptation in the Russian Arctic*

Curriculum Solid Earth

Gianluca Borracini *Glacial Geology And Landscape Analysis Of The Victoria Land To Reconstruct The Impact Of Climate Change On The Late Cenozoic Evolution Of The Antarctic Glacial System*

Roberto Borriello *Development of methodologies for the structural characterization of micro-crystalline phases in Antarctic meteorites*

Léa Dumon Steenssens *Influence of climate variations on coastal dynamics in Terra Nova Bay, Antarctica*

Alice Tomassini *Environmental forcings on the eruptability of magma from subvolcanic systems*

Curriculum Ocean and Cryosphere

Sheharyar Ahmad *Climate and Cryosphere Interaction in Karakoram and the Himalayas*

Iram Bano *Alpine glacial contribution to the hydrological balance of the Po River*

Elia Gipponi *Climatological and glaciological implication in the wester Italia Alps from the study of the LyS glacier ice core archive*

Nancy Luca' *Cross-slope exchange processes and ABBW production in the Ross Sea*

Curriculum Astronomy, Space & Earth Observation

Massimiliano Oranges *Solaris: a smart solar imaging system at high radio frequency for continuous solar monitoring and space weather*

