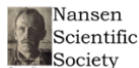


International interdisciplinary PhD and Post-Doc summer research school
organized by



St Petersburg
University



Observing and Modelling the Arctic Environment

- Climate processes, prediction and projection

at

**Nansen International Environmental and Remote Sensing Center (NIERSC),
St. Petersburg, Russia**

8th – 13th September 2019

Sponsored by

*the Research Council of Norway INTPART project “ARCONOR: Arctic cooperation between Norway, Russia, India, China
and US in satellite Earth observation and Education”,*

EC Horizon2020 “INTAROS: Integrated Arctic Observation System”

and the organizing partners.

The Nansen International Environmental and Remote Sensing Center (NIERSC) in St Petersburg is proud to announce the international interdisciplinary PhD and Post-Doc research school on ***Observing and modelling the Arctic – Climate processes, prediction and projection.***

The aim of this research school is to provide students with an overview of state-of-the-art research in the Arctic from observations through process understanding and model development to application. The research school will have five sessions addressing:

- (1) Observational capabilities: including in-situ measurements and satellite remote sensing, field campaigns and operational resources;
- (2) Dynamics of the Arctic environment: what we know about the most important processes and how we include them in climate models;
- (3) Surface coupling: a review of the multitude of surface coupling processes in the Arctic and current approaches to integrating this understanding in models at different scales;
- (4) Climate projection and prediction: anthropogenically-forced and natural climate change in the Arctic, perspective from the 21st century and opportunities with climate prediction;
- (5) Modelling for Arctic applications: using climate model results in other domains with examples from simulating marine primary production, future shipping routes, and other industrial activities in ice covered waters.

Students will be organized into working groups according to their research interests. Each day will have four to five interactive lectures, there will be student led discussion groups in the afternoons, and tutorials on the use of environmental data (remote sensing, simple energy-budget models, data handling for climate models). Each student group will identify a topic of interest at the start of the week and will summarize their perspective on this topic for a joint student report to be presented by the students on the last day of the workshop. The report will form the basis for a joint student publication to be developed after the research school.

Location: Nansen International Environmental and Remote Sensing Center, 14th Line 7, Vasilievsky Island, St Petersburg, Russia.

Time: 8th - 13th September 2019

Who should apply: PhD students and early stage post-doctoral level scientists from Russia and other countries.

Application procedure: Send a maximum **one-page** cover letter summarizing your research interests and motivation for joining the school and attach your CV to adm@niersc.spb.ru.

Deadline for application: 1st August at 12:00 CET (early applications are encouraged).

Costs: Hotel accommodation and meals will be covered by the hosts. Please indicate eventual need for travel funding, which will be reimbursed based on individually approved travel spending.

The research school is organized with financial support from the Norwegian Research Council project *ACRONOR: Arctic cooperation between Norway, Russia, India, China and US in satellite Earth observation and Education* and the EC Horizon 2020 project *INTAROS: Integrated Arctic Observation System* and the partner organizations.

Further information and program will be available [here](#).

Scientific Committee:

- ✓ Prof. Noel Keenlyside, University of Bergen/ Nansen Center, Bergen Norway, *Co-chair*
- ✓ Dr. M. Ravichandran; Director, National Centre for Polar and Ocean Research (ESSO-NCAOR), Goa, India, *Co-chair*
- ✓ Professor Sergey Aplonov; St. Petersburg State University, Russia
- ✓ Dr. Leonid P. Bobylev; Director, Nansen International Environmental and Remote Sensing Center (NIERSC), St. Petersburg, Russia
- ✓ Dr. Richard Davy, Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway
- ✓ Prof. Nikolay Filatov, Northern Water Problem Institute, Russian Academy of Sciences, Petrozavodsk, Russia
- ✓ Prof. Hartmut Grassl, Max Planck Institute for Meteorology, Hamburg, Germany
- ✓ Dr. Valentin Meleshko, Voeikov Main Geophysical Observatory (VMGO), St. Petersburg, Russia
- ✓ Lasse H. Pettersson, Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway
- ✓ Prof. Stein Sandven, Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway
- ✓ Prof. Vladimir Semenov, A.M. Obukhov Institute of Atmospheric Physics, Russian Academy of Sciences, Moscow, Russia.

Local organizing Committee:

- ✓ Dr. Leonid P. Bobylev; Director, Nansen International Environmental and Remote Sensing Center (NIERSC), St. Petersburg, Russia, *Co-chair*
- ✓ Lasse H. Pettersson, Nansen Environmental and Remote Sensing Center (NERSC), Bergen, Norway, *Co-chair*
- ✓ Dr. Natalia Gnatiuk, Scientist, NIERSC, St. Petersburg, Russia, *Deputy Chair*
- ✓ Maria Samsonova, NIERSC, St. Petersburg, Russia, *Financial issues*
- ✓ Lev Zaitsev, NIERSC, St. Petersburg, Russia, *Technical issues, transport*
- ✓ Olga Nesmeyanova, NIERSC, St. Petersburg, Russia, *Visas, accommodation, food*
- ✓ Dmitry Kondrik, NIERSC, St. Petersburg, Russia, *Programme tracking, following presentations and lectures*
- ✓ Dr. Elena Shalina, NIERSC, St. Petersburg, Russia, *Work with students*
- ✓ Dr. Richard Davy, NERSC, Norway, *Work with students*