

## "Economy and Society" Research Programme FEEM Lecture on

# "ARCTIC AMPLIFICATION, CLIMATE CHANGE, GLOBAL WARMING. NEW CHALLENGES FROM THE TOP OF THE WORLD"

by Peter Wadhams, Professor of Ocean Physics at the University of Cambridge

Milan, 12 May, 2015 – 10:00 a.m. Fondazione Eni Enrico Mattei Corso Magenta 63

The continuous and progressive transformations related to global warming in the Arctic are posing new challenges which require appropriate reflection as well as innovative and efficient solutions.

The melting of the Arctic ice started over 60 years ago, but its quick acceleration in the last decade brings about a wide range of dramatic consequences at economic, social and environmental level that in turn have geostrategic implications on a world scale.

What a few years ago was considered mainly a local problem is nowadays showing its full potential in transforming consolidated geopolitical relations: the melting of the Arctic ice - which is actually faster than predicted - may lead to conflicts in terms of navigation along new shipping routes, access to local resources and the subsistence of indigenous and local populations.

While looking for scientific and technological solutions, it is now urgent to also identify a new international governance that may support the implementation of an Arctic cooperation management system at a world level.

Peter Wadhams, Professor of Ocean Physics at the University of Cambridge, in the Lecture "Arctic Amplification, Climate Change, Global Warming. New Challenges from the Top of the World" will discuss these topics from a privileged point of view: leader of over 40 polar expeditions from the '70s until today, Professor Wadhams is in fact one of the most renowned international experts in the field. Presenting the results of over 40 years of research to an audience of experts, scholars and researchers, he will provide a unique perspective on the relationship between global warming in the Arctic and geopolitical dynamics, along with new solutions to adequately address the issues at stake.



#### Agenda

09:45 a.m.	Registration
10:00 a.m.	<i>Introduction and welcome address by</i> Carlo <b>Carraro</b> - Coordinator of the Programme "Climate Change and Sustainable Development", Fondazione Eni Enrico Mattei and Director of the International Center for Climate Governance
10:15 a.m.	<i>Lecture by</i> Peter Wadhams - Professor of Ocean Physics, University of Cambridge "Arctic Amplification, Climate Change, Global Warming. New Challenges from the Top of the World"
11:15 a.m.	Q&A session
12:00 p.m.	Networking refreshment

#### **Peter Wadhams**

<u>Peter Wadhams</u>, Head of the Polar Ocean Physics Group, is the most renowned British expert of sea ice, with 40 years of research experience on ice formations and on related ocean processes, both in Arctic and Antarctic.

Serving as Professor of Ocean Physics at the University of Cambridge, he wrote many publications concerning dynamics and thermodynamics of sea ice formations, ice thickness, waves propagation in ice, iceberg, ocean convections and related issues. Peter Wadhams led 46 research expeditions in polar seas, based on field camps on the icepack or on board of icebreakers and aircraft.

He sailed extensively on Arctic-proof submarines, equipped with multibeam sonar suites, used to map the polar caps topography. In this regard, Professor Wadhams has been a pioneer in the AUV (Automatic Underwater Vehicles) use under the ocean ice sheet, having successfully employed Maridan, Autosub II, Gavia and WHOI models during his missions.

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Participation is free of charge | Registration is required

If you would like to attend, given the limited availability of seats, we kindly ask you to **confirm your presence** <u>here</u> **no later than 8 May 2015**.

### Contacts

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