



Chemical & Physical Sciences
UNIVERSITY OF TORONTO
MISSISSAUGA

COLLOQUIUM
TUESDAY, 10 MARCH 2015
11:00 AM - 12:00 NOON
KN132

Dr. Christian Haas

York University

*Department of Earth and Space Science and Engineering
(Lassonde School of Engineering)*

Arctic Sea – where are we headed?



The shrinking Arctic sea ice cover is often taken as one of the most prominent indicators of recent climate change, and its early, complete disappearance seems almost inevitable in the public debate, spawning speculations about the opening of northern shipping routes and resource exploration, as well as about the extinction of polar bears and the collapse of Arctic food-webs. However, little is actually understood

about the recent rapid sea ice changes in the Arctic, and climate models continue to predict sea ice changes with little skill. The presentation will provide a status of observed sea ice changes in the Arctic and Antarctic, and will discuss some of the uncertainties related to changes of the sea ice mass balance. I will then focus on results of our own field and remote sensing research with regard to Arctic sea ice, particularly results from airborne and snowmobile-based ice thickness surveying. Results show large regional sea ice variability in the Canadian Arctic which represent different environmental conditions and prevents easy, general predictions of future ice conditions.