

**YORK UNIVERSITY
DEPARTMENT OF EARTH AND SPACE SCIENCE AND
ENGINEERING
and
CENTRE FOR RESEARCH IN EARTH AND SPACE SCIENCE
S E M I N A R**

**Dr. Wolfgang Rack
University of Canterbury**

**Precise mapping of ice shelf and sea ice
processes by ground validated remote sensing
data in Antarctica**

ABSTRACT

Ground validation is an important activity to fully exploit the satellite information. In this seminar satellite and ground validation studies from the Ross Sea area will be presented. These have been conducted over the past few years in tidal flexure zones, on ice shelves, and sea ice, in part in collaboration with the Centre for Research in Earth and Space Sciences. The results form the basis to derive ice thickness near grounding lines, and to shed light on the outflow of supercooled water and the formation of a sub-ice platelet layer in McMurdo Sound. The latter is important for converting ice freeboard to total thickness, and in understanding ice sheet - ocean processes.

BIOGRAPHY

Dr Wolfgang Rack holds a PhD in Glaciology (2000) from the Institute for Meteorology & Geophysics, University of Innsbruck, Austria. He was research fellow at the Alfred Wegener Institute for Polar and Marine Research (Germany) from 2001 to 2006; since then he has been Senior Lecturer for Glaciology and Remote Sensing at Gateway Antarctica, the Centre for Antarctic Studies and Research, Christchurch, New Zealand. Dr Rack spent 11 field seasons in Antarctica, primarily for satellite validation measurements like for CryoSat-2.



Refreshments will be served at 1:15 p.m. in PSE 422.

DATE: Wednesday, June 17, 2015
TIME: 1:30 p.m.
LOCATION: 422 Petrie Science and Engineering Building