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INDUSTRY - ACADEMIA PARTNERSHIPS & PATHWAYS



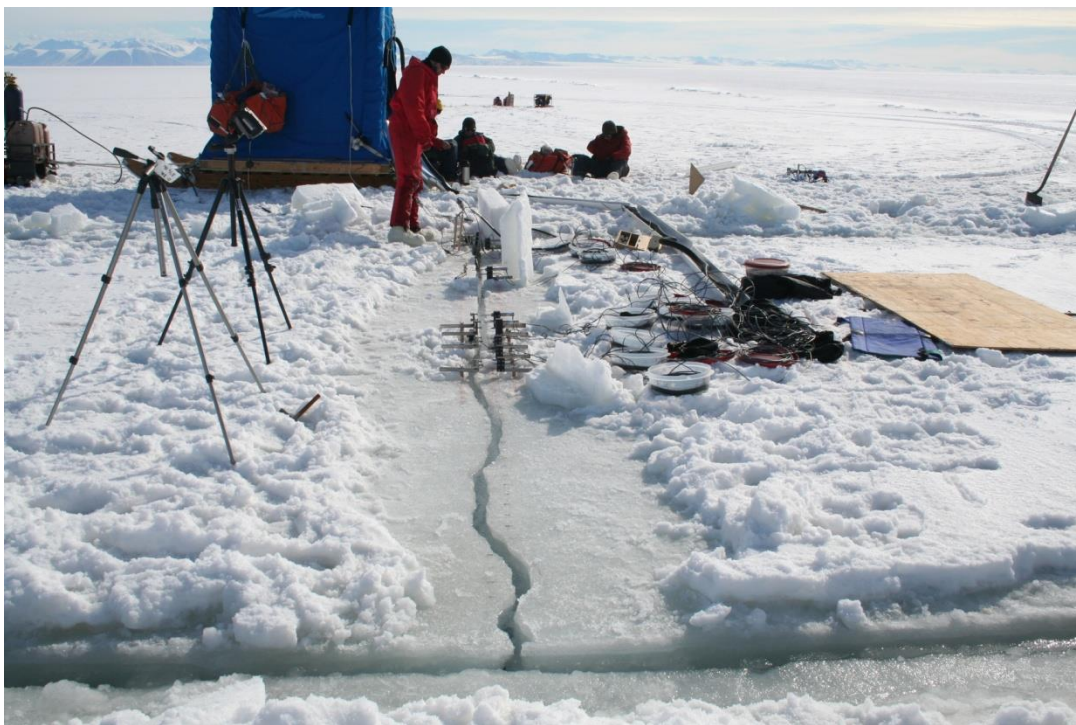
# Interdisciplinary Mathematics Seminar

*Thursday 17<sup>th</sup> April 2014, 15:10*

**Prof. John P. Dempsey**

Clarkson University, Potsdam, New York, USA

## *Fracture of Sea Ice in the Arctic and Antarctic*



Over the last half-century, research topics in sea ice mechanics and sea ice dynamics have included the large-scale response of sea ice to its environment, coupled atmosphere-ocean-ice climate models, as well as the passage of ships and the design of offshore structures in ice-covered seas.

The coupled influence of spatial and temporal scales underlies all sea ice mechanics and sea ice dynamics explanations, based on the recognition of subsets of processes and their interaction with adjacent scales. Recognition of the influence of scale effects on the fracture of ice has not evolved smoothly or rapidly. Associated investigations in the field and sub-size testing in the lab have offered unique challenges, both technical and human. This presentation will focus on these challenges, and summarize insights gained to date.

***Location: Lecture Theatre B, Ground Floor, Physical Sciences Building,  
Penglais Campus, Aberystwyth University.***

***All invited and encouraged to attend. Followed by tea and biscuits.***