



The Arctic Institute of North America presents the 2016-17

Arctic Speaker Series

Water on ice: knowns and unknowns of supraglacial hydrology

Who: Tris Irvine-Fynn	Date: Sept. 14, 2016	Time: 4:00 – 5:00 pm	Location: University of Calgary; Science A 106
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Scientists have long assumed that water rapidly runs off glacier surfaces, with negligible delay in the delivery of water to downstream environments. However, there is increasing evidence and recognition that the transfer of meltwater over glacier surfaces is more complex. Glacier surface hydrology has renewed itself as a burgeoning field of research. With recent work demonstrating glaciers are critical components within global nutrient cycles, the complexity in glacier surface runoff represents a subtle but critical regulator in the export of nutrients, microbial cells and particulate contaminants from glacierised catchments. Here, we consider what is known about meltwater transport processes, explore novel data

regarding glacier near-surface permeability, consider the effects of micro- and macro-scale topography, and highlight some of the remaining unknowns and their analogues within permafrost science.

Biography: Dr. Tris Irvine-Fynn is a glaciologist at the Centre for Glaciology, Aberystwyth University, Wales. Since 2000, Tris has worked on glacier science in polar regions, both in the Canadian and European High-Arctic, with particular focus on hydrology research topics. In addition to high latitudes, Tris has worked in sub-arctic Scandinavia and Greenland, the European Alps, New Zealand’s Southern Alps, Argentine Patagonia and the Nepali Himalaya. His research activities, while maintaining a “process glaciology” theme, bridge from geophysics to hydrochemistry, and geomorphology to ecology. Tris joined Aberystwyth’s Centre for Glaciology in 2011 as a Climate Change Consortium of Wales Research Fellow, becoming Senior Lecturer in 2015, and he is currently working on the NERC-funded “Black & Bloom” project that seeks to explain the changing albedo of the Greenland Ice Sheet. Originally from Cambridge, UK, Tris developed a love of mountainous regions from an early age, and enjoys any opportunity to step away from the desk-based job.

This event is **free and open to the public**

There will be a reception in the AINA offices (ES-1040) immediately following the presentation

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