An Introduction to Glacier Hydrology

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Date: Friday, October 9, 2015

Time: 9:00 - 10:00 AM

Location: 358 Willard Blg.

Coffee and donuts will be provided

Abstract: Ice sheets and glaciers are changing rapidly as the climate warms. The ice is often treated as a solid but behaves like a fluid depending on the time and length scales of the process. In addition, many of the observed changes are linked to liquid water flowing through, under, and at the edges of the ice sheets. For example, changes in glacial hydrology are linked to rapid (minutes to hours) and large (tenfold) increases in ice velocity. In this talk I trace a drop of water from when it melts on the ice sheet surface until it is discharged into the coastal seas, and introduced its impact on the ice along the way.

Bio: Ken Mankoff is a Research Associate in the Penn State Department of Geosciences where he studies ice sheet hydrology, ice/ocean interactions, and ice-proximal oceanography using a combination of observational fieldwork, low-cost robotic vehicles, remote sensing and novel sensors and algorithms. His research spans the path of a drop of water from when it melts on the surface (or at the base) of the ice sheet, flows through and under the ice sheet, and is exhausted into a Greenland fjord or under an Antarctic ice shelf.