

**Wykłady Polarne na Zaproszenie**  
**The Invited Lectures on Polar Research**

Centrum  
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Studies

**Serdecznie zaprasza na wykład:**

**„A macro- and micro- view of thermal processes in subglacial conduits”**

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**sala 128**

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*On the content*

Ice sheets and glaciers are changing rapidly as the climate warms. Unfortunately, the boundary that primarily controls the system – the glacier bed – is difficult to observe. In this talk I present an overview of the annual heat budget available for conduit formation in Greenland, and mm-scale observations of a glacier bed collected in a subglacial conduit under Hansbreen, Svalbard. To collect data under the glacier we used ~2000 PLN of equipment to build a high resolution 3D reconstruction, which is used as the boundary of a computational fluid dynamics model. Results show that traditional treatments of roughness (and therefore heat transfer to the glacier bed) may be invalid due to the size of rocks at the glacier bed.