## Postdoc / Ph.D. fellowships

# Instabilities in ice flow and the genesis of ice streams

A GIF – funded project, <u>2020</u>



**Background**: Ice streams are bands of fast-flowing ice that carry most of the ice flux from ice sheets towards the ocean. The flow of many ice streams is believed to be strongly controlled by complex lubrication networks located underneath the ice and consisting of water and deformable sediments. From a fluid dynamical perspective, such a phenomenon can be modelled as a viscous gravity current of a complex fluid that turns unstable due to the reduction of traction along its base caused by a lubricating fluid.

**Research goals**: Investigate the mechanism of such an instability and the potential genesis of ice streams by combining laboratory experiments, theoretical analyses, numerical simulations and available geophysical observations.

Available fellowships: Two available fellowships, each for 3 years, full time:

- 1. Postdoc/Ph.D. fellowship (Experimental fluid mechanics).
- 2. Postdoc/Ph.D. fellowship (Theoretical fluid mechanics).

### Start date: A.S.A.P.

**Qualifications**: Background in Physics/Applied Mathematics/Engineering or related fields. Excellent experimental or computational skills. Excellent oral and writing skills in English.

### How to apply: email to roiy@bgu.ac.il:

- Cover letter that includes statement of interest,
- CV,
- Two reference letters



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