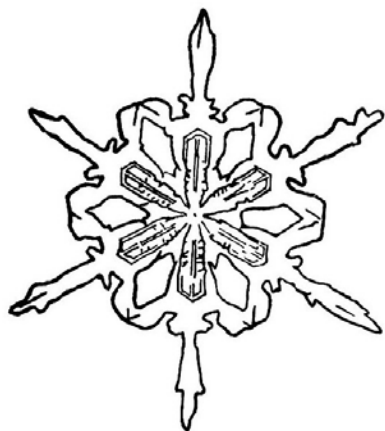


INTERNATIONAL GLACIOLOGICAL SOCIETY

INTERNATIONAL SYMPOSIUM ON DYNAMICS IN GLACIOLOGY

Limerick, Ireland
17–22 August 2008



CO-SPONSORED BY

University of Limerick
MACSI (Mathematics Applications Consortium for
Science and Industry)

FIRST CIRCULAR
March 2007

Registered Charity

The International Glaciological Society will hold an International Symposium on Dynamics in Glaciology in 2008. The symposium will be held in Limerick, Ireland, from 17–22 August.

THEME

Mathematical and computational modelling have formed an integral part of the development of glaciology since its development as a quantitative science. Early examples of this are the development of the theory of kinematic (surface) waves on glaciers, the theory of glacier sliding over hard beds, and the theory of subglacial drainage. As the theory of such phenomena develops, new observations and insights motivate the construction of new and better theoretical models. Recent examples include the dynamics of ice motion over subglacial till, the formation of subglacial landforms, and the ice dynamic behaviour which causes Heinrich events.

This conference will focus on the interplay between novel glaciological observations, and the models which are necessary to explain such observations. It will focus on the study of phenomena in glaciology which are dynamic in nature, involving variation in time and/or space. The purpose of the meeting is to bring together field scientists and experimentalists who have intriguing observations to report with theoreticians and modellers who have been studying such phenomena. A particular encouragement will be to enable a workshop atmosphere in which open problems and observations will be discussed.

TOPICS

The suggested topics include:

1. Surging glaciers. Are the different types of surging glacier (Variegated/Trapridge type) amenable to a unified theoretical description? Can theories predict surging behaviour quantitatively?
2. Ice streams. Are ice streams due to thermal runaway? Hydraulic runaway? Are they topographically controlled?
3. Jökulhlaups. Is the Nye theory satisfactory? When can we expect sheet floods of the 1996 Grímsvötn type to occur?
4. Ice sheets and climate change. Can the Milankovitch mechanism cause the initiation of ice ages? Can climate change cause marine ice sheet collapse? Is the current behaviour of the Greenland Ice Sheet climatically controlled?
5. Glacial geomorphology. How are drumlins and eskers formed? What causes mega-scale glacial lineations?
6. Subglacial hydrology. Are the Röthlisberger/linked cavity/canal theories of drainage satisfactory? What sort of theory is appropriate under an ice sheet?
7. Extraterrestrial ice. How can we explain the troughs on the Martian ice caps, or the wrinkled crust of Europa?
8. Paleoglaciology. Do we understand Heinrich events? What caused Dansgaard-Oeschger events? Can we explain Snowball Earth?

SESSIONS

Oral and poster presentations will be held on four and a half days. There will be ample opportunity for poster displays.

PUBLICATION

Selected papers from the symposium will be published by the Society in the *Annals of Glaciology*. All papers (including those based on posters) will be refereed and edited according to the Society's regular standards before being accepted for publication.

VENUE

The meeting will be held at the University of Limerick in the west of Ireland. Easy access to the University is via Shannon Airport, and the

surroundings offer plenty of scope for glaciological, geological and geographical excursions (drumlins, limestone pavement, caves, hill forts, alpine flora).

ACCOMMODATION

Details will be given in the Second Circular.

FURTHER INFORMATION

If you wish to attend the symposium please return the attached form as soon as possible. The Second Circular will give further information about accommodation, the general programme, and preparation of abstracts and final papers. Copies of the Second Circular will be sent to those who return the attached reply form. Members of the International Glaciological Society will automatically receive one.

SYMPOSIUM ORGANIZATION

Magnús Már Magnússon (International Glaciological Society)

SCIENCE STEERING AND EDITORIAL COMMITTEE

Andrew Fowler (Chief Scientific Editor), Chris Clark, Garry Clarke, Richard Hindmarsh, Tavi Murray, Felix Ng, Christian Schoof.

LOCAL ARRANGEMENTS COMMITTEE

Andrew Fowler (Chairman), Stephen O'Brien, Alan Hegarty, Peg Hanrahan, Jenny Wright.

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INTERNATIONAL SYMPOSIUM ON
DYNAMICS IN GLACIOLOGY
LIMERICK, IRELAND, 17–22 AUGUST 2008

Family Name: _____

First Name(s): _____

Address: _____

Tel: _____ Fax: _____ E-mail: _____

I hope to participate in the Symposium in August 2008 ☐

I expect to submit an abstract ☐

My abstract will be most closely related to the following

topic(s): _____

I am interested in an accompanying person's programme ☐

I am interested in an extended post/pre-symposium tour ☐

PLEASE RETURN AS SOON AS POSSIBLE TO:

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