



INTERNATIONAL GLACIOLOGICAL SOCIETY

International Symposium on

# Interactions of Ice Sheets and Glaciers with the Ocean



Scripps Seaside Forum  
Scripps Institution of Oceanography  
La Jolla, California, USA  
27 June–2 July 2021

*Co-sponsored by:*

- ❄ Forum for Research into Ice Sheet Processes (FRISP)
- ❄ Institute of Geophysics and Planetary Physics
- ❄ Scripps Institution of Oceanography

FIRST CIRCULAR

July 2020

<http://www.igsoc.org/symposia/2021/lajolla>

The International Glaciological Society will hold an International Symposium on 'Interactions of Ice Sheets and Glaciers with the Ocean' in 2021. The symposium will be held on the oceanfront in La Jolla, California, USA, from 27 June–2 July 2021.

## THEME

This symposium is in direct continuation of the symposia held in 2011 and 2016 with the same theme. It is felt that considerable advances have been in the last five years to warrant a revisit to it.

The mass balance of the Antarctic and Greenland ice sheets and the circulation of the adjacent oceans are strongly coupled through physical processes occurring at the ice-ocean interfaces (i.e., the fronts and bases of ice shelves and glacier tongues, and the termini of tidewater glaciers). Improved understanding of these processes is essential so that they can be realistically represented in models of how ice sheets and glaciers would evolve in a changing climate, and to improve predictions of global sea level change. The goals of this symposium are: (1) to assess the status of our knowledge of ice–ocean interactions; and (2) to discuss what is needed for development of reliable, quantitative models of ice sheet evolution and associated changes in ocean circulation. We hope this symposium will attract experts in ice shelf, ice sheet, glacier, ocean and climate studies whose research addresses interactions of the ocean and ice in the global climate system using in situ observations, remote sensing and/or modeling. Come and attend what will be a stimulating and productive symposium in a beautiful setting in Southern California.

## SUGGESTED TOPICS

The thematic focus of the Symposium is on ice–ocean interaction in the broadest sense, and all interpretations of this theme will be welcome as submissions for presentation at the meeting. Suggestions for specific topics of interest are:

1. Mass balance processes and dynamics of ice shelves and tidewater glaciers
2. Coupling between grounded and floating ice
3. Modelling techniques that advance our understanding of atmosphere/sea-ice/ice sheet/ocean interaction
4. Impact of meltwater, icebergs, runoff and sediment discharge on the ocean.

5. Oceanic, glaciological, atmospheric and sea-ice processes and interactions regulating the delivery of warm ocean waters to the margins of glaciers and ice shelves
6. Observational records of change in ice shelves and tidewater glaciers and regional ocean, sea-ice, and atmosphere.
7. Traditional and emerging techniques for characterizing, monitoring, and sampling polar coastal environments and processes (we particularly encourage submissions highlighting low carbon technologies and approaches).
8. Novel strategies and programs to increase international and multidisciplinary collaboration and engagement of under-represented minorities as well as Arctic communities in ice/ocean research.

## PROGRAMME

A mixture of oral and poster sessions, interlaced with ample free time, forms the general framework of the symposium, which is intended to facilitate exchange of scientific information between participants in an informal manner. Additional activities include the customary icebreaker, a symposium banquet and a selection of activities for the traditional Wednesday afternoon mid-symposium break.

## ABSTRACT AND PAPER PUBLICATION

Participants wishing to present a paper (either oral or poster) at the Symposium will be required to submit an abstract by **28 February 2021**. A collection of submitted abstracts will be provided for all participants at the Symposium. The Council of the International Glaciological Society has decided to publish a thematic issue of the *Annals of Glaciology* on topics consistent with the Symposium themes. Participants are encouraged to submit manuscripts for this *Annals* volume.

## SYMPOSIUM ORGANISATION

Magnús Már Magnússon (International Glaciological Society)

## SCIENCE STEERING EDITORIAL COMMITTEE

Chief Editor: Helen Fricker (University of California, San Diego).  
Scientific Editors include: Fiamma Straneo, Laurie Padman, Jamin Greenbaum. More editors are in the pipeline and we will update the online circular as and when they are confirmed.

## LOCAL ORGANIZING COMMITTEE

Helen Amanda Fricker (Chair), Sarah Gille, Lynne Talley, Fiamma Straneo, Matthew Mazloff, Jamin Greenbaum.

## VENUE

The symposium will be held at the Scripps Seaside Forum, an extraordinary, oceanfront conference center facility located in the heart of Scripps Institution of Oceanography, with a breathtaking view over the Pacific Ocean. Just steps from the sand, it offers a relaxed and comfortable atmosphere, yet provides conference support through state-of-the-art audio-visual equipment ranging from 3-D projection systems, multiple computer connections, and surround-sound. The beachfront location offers plenty of opportunity for mid-week leisure activities such as surfing, sea-kayaking, sailing, volleyball, walking, etc.

## LOCATION

San Diego is renowned for its idyllic climate, enjoying beautiful weather year round with an average daily temperature of 70.5°F (21.4°C). California's second largest city and the United States' eighth largest, San Diego has a citywide population of over 1.4 million. As well as its beaches, San Diego has an impressive array of world-class family attractions, such as the San Diego Zoo and Wild Animal Park, Sea World San Diego and LEGOLAND California. San Diego offers an expansive variety of things to see and do, appealing to guests of all ages. This would be the ideal destination for an accompanying family! The most difficult decision to make regarding a trip to San Diego is determining what to do and see among the region's vast and diverse offerings.

## FURTHER INFORMATION

If you wish to attend the symposium please register your interest online at <http://www.igsoc.org/symposia/2021/lajolla>.

The Second Circular will give further information about accommodation, the general scientific programme, additional activities, preparation of abstracts and final papers. Members of the International Glaciological Society will automatically receive one, as will all those who have pre-registered.

Information will also be updated on the IGS conference website, <http://www.igsoc.org/symposia/2021/lajolla> as it becomes available.

A local website will open later in 2020.

