



International Summer School on the Polar Climate System

21 – 25 May 2018 Hohai University, Nanjing, China

<http://202.119.112.75/s/2159/t/2672/a/172397/info.jspy>

This summer school is aimed at postgraduate students and early career scientists who would like to obtain a solid grounding in polar climate system science, with a particular focus on the atmosphere, ocean and sea ice and their interactions. It is desirable that attendees have a basic knowledge of the workings of the climate system, with experience in meteorology, oceanography or the cryospheric sciences. The school will consist of a series of lectures by world-leading experts in polar science, who will deal with the maintenance of the polar climates, their role in the global system, links to lower latitudes, modelling, change over recent decades and how the system may change over the next century. There will also be practical sessions involving analysis of observations and model output.

The organising committee consists of Prof Zhaomin Wang (Hohai University), Prof John Turner (British Antarctic Survey), Prof Kent Moore (University of Toronto), Prof Xiangdong Zhang (University of Alaska Fairbanks), Prof Annette Rinke (Alfred Wegener Institute, Germany).

Funding is available to support the attendance of a number of students.

For further information please contact Prof Zhaomin Wang, zhaomin.wang@hhu.edu.cn; Ms Mengting Yin, mengting.yin@hhu.edu.cn.

Confirmed instructors:

Prof John Turner, British Antarctic Survey;
Prof Kent Moore, University of Toronto;
Prof Ryan Fogt, Ohio University;
Prof Alexandra Jahn, University of Colorado Boulder;
Prof Marilyn Raphael, University of California, Los Angeles (UCLA);
Prof Robert Pickart, Woods Hole Oceanographic Institution;
Prof Xiangdong Zhang, University of Alaska Fairbanks;
Prof David Schneider, National Center for Atmospheric Research in the USA;
Prof Mark Seefeldt, University of Colorado Boulder;
Prof Zhaomin Wang, Hohai University.

Monday AM

1. 8:00-8:30 Introductions and goals of the summer school [Zhaomin Wang and John Turner].

2. 8:30-9:15 Introduction to the Arctic climate system. Data, processes, climatology, mean circulation and extremes. Atmosphere, ocean and sea ice.[instructor: Kent Moore]
3. 9:15-10:00 Introduction to the Antarctic climate system. Data, processes, climatology, mean circulation and extremes. Atmosphere, ocean and sea ice. [instructor: Ryan Fogt]
4. 10:30-11:15 Recent sea ice changes in the Arctic [instructor: Alexandra Jahn]
5. 11:15-12:00 Recent sea ice changes in the Antarctic [instructor: Marilyn Raphael]

Monday PM

1. 1:30-3:30 Recent atmospheric changes in the Arctic [instructor: Kent Moore]
2. 4:00-6:00 Recent atmospheric changes in the Antarctic [instructor: Ryan Fogt]

Tuesday AM

1. 8:30-10:00 Recent ocean changes in the Arctic[instructor: RobertPickart]
2. 10:30-12:00 Recent ocean changes in the Antarctic [instructor: to be confirmed]

Tuesday PM

1. 1:30-3:30 Links between the Arctic and lower latitudes [instructor: Xiangdong Zhang]
2. 4:00-6:00 Links between the Antarctic and lower latitudes [instructor: David Schneider]

Wednesday AM

1. 8:30-10:00 Modelling the polar atmosphere [instructor: Mark Seefeldt]
2. 10:30-12:00 Modelling the polar ocean [instructor: Zhaomin Wang]

Wednesday PM

Breakout session 1 [IABP, Kent Moore with junior staffs from Hohai University]

Thursday AM

1. 8:30-10:00 Possible future evolution of the Arctic climate [instructor: Alexandra Jahn]
2. 10:30-12:00 Possible future evolution of the Antarctic climate [instructor: John Turner]

Thursday PM

Breakout session 2 [Zhaomin Wang: polar ocean modelling, e.g., MITgcm ocean-sea ice model]

Friday AM

1. 8:30-10:00 Arctic: International polar research initiatives, coordination, and big questions - SCOR, IACS, IPCC, CliC, APECS etc. How to get involved.[instructor: Xiangdong Zhang]

- 10:30-12:00 Antarctic: International polar research initiatives, coordination, and big questions - SCAR, SCOR, IPCC, CliC, APECS etc. How to get involved.[instructor: John Turner]

Friday PM

- 1:30-3:30 Presentations on the results of the breakout sessions [available organizing committee members]
- 4:00-6:00 Final question and answer session [all available instructors]

Sponsors:

Hohai University (HHU);
 British Antarctic Survey (BAS);
 University of Toronto (UT);
 Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research (AWI);
 Scientific Committee on Antarctic Research (SCAR);
 International Arctic Science Committee (IASC);
 International Association of Meteorology and Atmospheric Sciences (IAMAS);
 International Commission on Polar Meteorology (ICPM);
 International Commission on Climate (ICCL).

