

Academic Conferences

John Stockie

Department of Mathematics
Simon Fraser University
<http://www.math.sfu.ca/~stockie>

Computational Fluid Dynamics Research Group

October 28, 2013

Outline

- 1 Types of Conference
- 2 Choosing the Right Meeting for You
- 3 What to Do When You're There

Motivation

- Attending conferences is an essential part of being an academic:
 - Communicating and promoting your work
 - Keeping informed about the latest developments in your field
 - Meeting people and developing collaborations
 - Getting new ideas
 - Socializing with old friends and colleagues
 - Belonging to a community
- I encourage all my grad students and postdocs to attend conferences regularly (\approx once per year).
- I will try to bring interesting events to your attention, but I expect that you also take some **initiative!**

Outline

- 1 Types of Conference
- 2 Choosing the Right Meeting for You
- 3 What to Do When You're There

Types of conference

There are many different types of conference/congress/workshop/meeting that should be of interest to students and postdocs:

- Annual society meetings
- Regularly recurring (n -ennial) topical meetings
- One-off workshops on special topics
- Industrial problem-solving workshops
- Summer schools, short courses and tutorials
- “Young Researcher” workshops
- Local meetings
- Mitacs soft skills training (STEP) workshops

Math society annual conferences

These are general non-specialist meetings that can vary a lot in size:

- National math societies: **CAIMS**, **SIAM**, **CMS**, **AMS**
- Enormous meetings of international societies: **ICIAM**, **ICM**, **ASME**, **WCCM**, **GAMM**
- National/international organizations with some disciplinary focus:
 - **InterPore**: porous media flow, international
 - **ECMI**: industrial mathematics, Europe
 - **SMB**: mathematical biology, North America

Topical conferences

These are meetings on more focused areas, many with smaller groups of 30-50 people:

- Regularly-recurring events:
 - **PNWNAS** (numerical analysis, annual)
 - **SciCADE** (scientific computing and differential equations, biannual)
 - **Algoritmy** (scientific computing, triannual, Slovakia)
 - **Gordon Conferences** (all scientific disciplines, many recur every 2-3 years, eastern USA)
 - **SIAM topical meetings** (mostly biannual)
- One-off workshops:
 - Canadian math institutes: **BIRS**, **PIMS**, **Fields**, **CRM**, **AARMS**
 - US math institutes: **IMA**, **IPAM**, **MSRI**, **ICERM**, **MBI**
 - International math institutes: **Newton** (UK), **IMS** (Singapore), **Oberwolfach** (Germany), and many others

Industrial-focused workshops

These meetings either involve industry participants or focus on problems from industry:

- **IPSW** (industrial problem-solving workshops) or “study groups”
- Graduate math modelling camps: often attached to an IPSW:
 - **PIMS Graduate Industrial Math Modelling Camp** (GIMMC)
 - **PIMS-IMA Mathematical Modeling in Industry**
 - **WPI Mathematical Problems in Industry** (Massachusetts)
 - **OCCAM Graduate Modelling Camp** (Oxford, UK)
- **ECMI**: European Consortium on Mathematics in Industry

Student focused workshops

- Summer schools: often run through the Institutes
- Short courses and tutorials: typically run as part of a conference
- Young Research workshops: for students and postdocs
- Local (Vancouver) conferences: IRMACS, UBC/SFU retreat
- **Mitacs STEP** workshops: business skills

Some upcoming meetings

Some meetings of particular interest:

- IMA Hot Topics Workshop on “Mathematics at the Interface of Partial Differential Equations, the Calculus of Variations and Materials Science” (Minneapolis MN), 21-23 May 2014.
- CAIMS Annual Meeting (Saskatoon SK), 22-26 June 2014.
- SIAM Annual Meeting (Chicago IL), 7-11 July 2014.
- “Recent developments in the adaptive solution of PDEs” (St. John's NF), 17-22 August 2014: short course (Weizhang Huang) and student/PDF-focused workshop.
- Fields-Mprime Industrial Problem-Solving Workshop (Toronto ON), 18-22 August 2014.

Outline

- 1 Types of Conference
- 2 Choosing the Right Meeting for You
- 3 What to Do When You're There

How to find a meeting

There are a couple of places where a LOT of applied math meetings are conveniently listed:

- [AMS conference calendar](#)
- [SIAM conference calendar](#)
- [NA-digest mailing list](#)

What to look for?

- Meeting topics: broad or focused
- Profile of plenary speakers
- Reputation of local organizers and scientific committee
- Location: holiday spot, big/small hotel, university campus
- Registration fee: high prices suggest it's more a money-making venture than an academic meeting
- Published conference proceedings: journal or proceedings volume, publisher, distribution (check in library)
- Length of talks, number of parallel sessions
- Student travel funds
- Short courses
- Poster session

How to afford it?

- Go to as many local/BC/Canadian meetings as you can
- Apply for SFU's Graduate Travel and Minor Research Award (requires that you plan well in advance)
- Check whether there is a student travel fund (common for math institutes)
- Ask John
- Only as a very last resort should you spend any of your own money

I do budget for your conference travel, but these funds are limited. So I expect that you will look into all available sources of external funding.

What to avoid?

There are some “warning signs” of low-quality meetings:

- Scientific committees with 100's of names that you don't recognize
- Unusually high registration fees or all-inclusive prices
- Predatory conference organizers: WIT (Wessex), OMICS, ...

If you're wondering, then just ask me!

Exceptions: a few examples of border-line cases

- EngConf International
- ICNAAM

My personal preferences

- Prefer attending smaller ($\lesssim 50$ people) workshops, focused on specific topics, where I can talk to many experts in a specific field.
- CAIMS Annual Conference at least once every two years – this is “my community” (applied mathematics).
- Hope to attend InterPore conference sometime soon.
- Occasional very large conference to get a broad overview of activities, esp. SIAM or ICIAM.
- Favourite venue is BIRS (Banff): small, invited, focused, very high quality, remote, all-inclusive.
- Recently I have cut back on travel a lot. But ideally I would aim to attend 3-5 meetings annually.

Outline

- 1 Types of Conference
- 2 Choosing the Right Meeting for You
- 3 What to Do When You're There

At the meeting

- Study the program carefully, identify talks you want to hear and people you'd like to meet
- If you really want to meet someone, then email them ahead of time
- If your supervisor is there, ask them to introduce you to people
- Ask questions during and after the talks
- Go to social events and talk to some strangers
- Participate in student events
- Attend the poster session and talk to presenters
- Give a talk and/or present a poster
- Organize a minisymposium (requires very advanced planning)
- Do some sightseeing and have some fun!

My expectations

I expect that you'll get the most of your conference experience by ...

- Giving an oral or poster presentation on your research
- Taking part in relevant activities
- Talking to people about your research!!
- Afterwards, giving a report on your experience in our weekly group meeting