

**Submittee:** Dave Campbell

**Date Submitted:** 2009-07-10 13:45

**Title:** Workshop on Statistical Methods for Dynamic System Models

**Event Type:** Conference-Workshop

---

**Location:**

Harbour Center campus of Simon Fraser University

---

**Dates:**

June 4-6, 2009

---

**Topic:**

The topic was statistics with emphasis on applications to differential (and difference) equation models.

---

**Methodology:**

There were 18 lectures over 3 days. Each lecture was 30 minutes with an additional 15 minutes for questions. The room that we used was semi-circular to further encourage discussion by ensuring that everyone had a good view of the slides and of each other. The room geography also made it easier for participants to hear each others questions and comments. In addition, lunches and coffee breaks were long to encourage further discussion. The first day ended with a reception and a poster session, where 9 students and postdocs presented their work. There were 60 participants (from 10 countries) where in total 27 were presenting their work through a talk or a poster. The first day was long, with 8 presentations and the reception/poster session. The second day was only 6 speakers and the third day there were only 4 speakers. This format maintained interest and prevented 'workshop burnout'.

---

**Objectives Achieved:**

The diversity of the talks highlighted the wealth of application areas using these methods, for instance, talks and posters were from: fisheries management, neuroscience, epidemiology, criminology, systems biology, seismology, chemical engineering, computer science, genetics and more. This workshop afforded the opportunity for methodologists working in a variety of fields to learn about the latest research. Furthermore it allowed people from specific application areas to see commonalities in the methods that they are using and highlighted areas in need of further research. The workshop provided abundant opportunities for collaboration and networking. Personally I developed new collaborations and in one case I had the time and opportunity to workout the start of a paper with someone I otherwise may not have met. Furthermore I learned about interesting new methods and came up with some several new research ideas from the meeting and had the chance to network with new and old collaborators.

---

**Scientific Highlights:**

The 25 students and postdocs were valuable contributors to the dynamic of the event. Please see

the attached summary of the workshop feedback that we received.

---

**Organizers:**

David Campbell (Primary Contact), Assistant Professor, Department of Statistics and Actuarial Sciences Simon Fraser University, Surrey Campus 13450-102nd St. Surrey, V3T 0A3 dac5@sfu.ca (778)-782-3730 Jiguo Cao Assistant Professor, Department of Statistics and Actuarial Sciences Simon Fraser University Burnaby, V5A 1S6 jca76@sfu.ca (778) 782-7600 Giles Hooker Assistant Professor: Department of Biological Statistics and Computational Biology Department of Statistical Science 1186 Comstock Hall Cornell University Ithaca, NY, 14853 giles.hooker@cornell.edu (607) 255-1638 Subhash Lele Professor Department of Mathematical and Statistical Sciences University of Alberta Edmonton, AB T6G 2G1 slele@ualberta.ca (780) 492-4290 Jim Ramsay Adjunct Professor University of British Columbia Emeritus Professor McGill University 2748 Howe St., Ottawa, Ontario K2B 6W9 ramsay@psych.mcgill.ca (613) 726-1767

---

**Speakers:**

James Beck (Department of Civil Engineering and Applied Mechanics, California Institute of Technology) Dave Campbell (Department of Statistics and Actuarial Science, Simon Fraser University) Jiguo Cao (Department of Statistics and Actuarial Science, Simon Fraser University) Sean Cox (School of Resource and Environmental Management, Simon Fraser University) Brian Dennis (Department of Fish and Wildlife Resources and Department of Statistics, University of Idaho) Mike Dowd (Department of Mathematics and Statistics, Dalhousie University) Mark Girolami (Department of Computer Science, University of Glasgow) Spencer Graves (Productive Systems Engineering) Giles Hooker (Cornell University) Samuel Kou (Department of Statistics, Harvard University) Aaron King (Department of Mathematics, University of Michigan) Mark Lewis (Centre for Mathematical Biology, University of Alberta) Subhash Lele (Department of Mathematical and Statistical Sciences, University of Alberta) Jie Peng (Department of Statistics, University of California Davis) Randall Peterman (School of Resource and Environmental Management, Simon Fraser University) Perry de Valpine (Department of Environmental Science, Policy and Management, University of California, Berkeley) Simon Wood (Department of Mathematical Sciences, University of Bath) Hulin Wu (Center for Biodefence Immune Modeling, University of Rochester) Rongling Wu (Departments of Public Health Sciences and Statistics, Pennsylvania State University) The list of speakers is available here: <http://www.stat.sfu.ca/~dac5/workshop09/Speakers.html> with links to the talk abstracts

---

**Links:**

<http://www.stat.sfu.ca/~dac5/workshop09/Welcome.html>

---

**File Uploads:**

Additional Upload 1: [http://www.pims.math.ca/files/final\\_report/Workshop\\_feedback.pdf](http://www.pims.math.ca/files/final_report/Workshop_feedback.pdf)

---