

Submitted by Lauchie MacDonald, Mathematics Department, UBC

**Date Submitted:** July 5, 2016

**Title:** FMCS2016

**Event Type:** Conference Workshop

**Location:** University of British Columbia

**Dates:** June 2-5, 2016

**Topic:** Foundational Methods in Computer Science

**Methodology:** Lectures

**Scientific Highlights:**

Vaughan Pratt, Computer Science, Stanford University, spoke on “Model Complexity of Natural Phenomena, by Analogy with Computational Complexity”. A fascinating talk on climate change using historical weather data.

Jamie Vicary, Computer Science, Oxford University, U.K., gave a demonstration of the proof assistant program called Globular, which can be used to describe higher order categorical structures using generators and relations.

Dorette Pronk, Mathematics, Dalhousie University, and Laura Scull, Mathematics, Fort Lewis, Colorado, were invited speakers. They both presented talks on different aspects of their work on Orbifolds.

Ernie Manes, Mathematics, University of Massachusetts, and Philip Mulry, Computer Science, Colgate University, made presentations on monads and their algebras.

Robin Cockett, Computer Science, University of Calgary, brought 6 graduate students with him.

All of the 9 graduate students attending the conference gave talks on their work, some for the first time to an audience outside their university. This is in keeping with the FMCS policy of having graduate students present their work in front of experts at the beginning of their careers.

**Organizer:** Lauchie MacDonald, Mathematics, University of British Columbia, Vancouver, Canada

**Speakers:**

There were 21 talks in all including those by the 3 invited speakers. A list of all the speakers, the titles of their talks, as well as abstracts, can be found in the conference program.

**Comments / Miscellaneous:** The financial support given by PIMS was crucial to the success of these meetings. Maret Christiansen volunteered many hours organizing the details of the conference including the booking of the private residence and caterers for the very successful conference dinner, and of the

entertainment by local musicians, as well as organizing transportation to and from the site. Ruth Situma, on behalf of PIMS, booked the lecture room and caterers for the coffee breaks and reception.