CONNECTING WOMEN IN MATHEMATICS ACROSS CANADA

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1 Goals

This is an exciting time for women and visible minorities in the basic sciences. More and more women from diverse backgrounds continue to beat formidable odds and come to the forefront of their professions with spectacular achievements. For the first time in its distinguished history, the Fields medal has been awarded to a woman, Professor Maryam Mirzakhani. The presidents at the helm of the International Mathematical Union (IMU) and the Canadian Mathematical Society (CMS) are two other highly acclaimed female mathematicians, respectively Professors Ingrid Daubechies and Lia Bronsard. For the last decade or so, considerable effort has been invested in researching and ensuring gender equity, and we are beginning to see the gratifying repercussions of this heightened awareness. At the same time, this increase in diversity has not yet resulted in a representation of women and minorities in graduate and postgraduate programs or as university faculty at the rate or proportion one might expect. We are still looking for ways to support this pipeline.

The aim of the 2-day BIRS workshop was to target top female junior mathematicians from across the country, who are close to obtaining a Ph.D. or have just graduated. This is a time when researchers are faced with the challenges of job search in an increasingly tough academic environment. For graduate students, this may involve landing a coveted postdoctoral position. Postdocs on the other hand would be looking for tenure-track and/or instructorship positions after their term. Different job searches come with varying, often non-explicit, criteria. Preparing oneself for a largely unknown hiring process can be stressful. This is especially true for women, who are often a small minority within their respective programs, and hence lack as extensive a support system as men. Also, women role models are much rarer, making it difficult for the junior women researchers to visualize themselves in senior academic roles.

2 Activities

The program made an effort to create a valuable experience for the participants within a limited timeframe. The highlights included:

- a collaborative and encouraging environment that facilitated interaction, as well as one-on-one mentorship,

- expert advice, general and personalized, related to research, teaching, giving talks and other facets of academic life,
- the presence of many role models.

We wanted the participating students to leave with the understanding that they are not alone (even though they may be among a mere handful of females in their respective programs), that women are being increasingly successful in challenging and rewarding careers and having a positive impact on their communities.

Given the limited amount of time we had, we broke the program into three parts. We made sure all junior participants were allowed time to present their work to the other attendees, as if they were giving a short job talk. We then had general discussion times built into the program as well as one on one meetings with assigned mentors so that the junior mathematicians could receive feedback on their presentations, as well as general career advice.

Finally, we had three (of the originally planned four) main invited lectures focusing on some major aspects of a mathematical career: Research, University Teaching, and Presenting Research in Conferences. These fantastic talks were interactive, and followed by passionate discussions.

We all came away from the meeting wishing it had been longer! This year we will apply for a 5-day workshop at BIRS which will allow us to cover much more ground.