



Reflections from the President-Elect

Cover Article

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As the new President-Elect of the CMS, let me continue the tradition of introducing myself to those who don't know me, and sharing my thoughts on our amazing society of mathematicians.

I grew up in Mississauga, Ontario, and attended the publicly funded Catholic school. My dad, Joseph Csima, was a combinatorist who was a Professor at McMaster University, and shared with me his love of mathematics. I was one of four girls (three named Barbara) on our high school "Math League" team. I thought Math League was a lot more fun than math contests, in which I participated somewhat more reluctantly. Encouraged by my dad, I attended the University of Toronto for undergrad, where I did a Specialist in Mathematics, and also did a Major in Actuarial Science. Encouraged by one of my instructors at U of T, I attended the University of Chicago for grad school. My advisor was Robert Soare, and I learned much more from him than just Computability Theory. His care for his students, his field of research, and the community, were inspiring. After Chicago, I did a post-doc at Cornell University under the mentorship of Richard Shore. I am so grateful for the many hours of instruction, mathematical advice, and life advice that I received from my mentors over the years, and I aspire to pay it forward in some way.

It was always my goal to return to Canada, and in 2005 my dream came true. I came to the University of Waterloo as an Assistant Professor, and was a recipient of an NSERC UFA. Shortly after arriving, I was encouraged by senior department members to join the CMS. I cheerfully purchased my lifetime membership with my start-up funds. My research area is unfortunately not well represented in Canada. Without the CMS, I would have been isolated; getting to know only my colleagues at Waterloo and those in my research group from elsewhere in the world. Through the CMS, I've been able to connect with more members of our mathematical community across the country, which has been very valuable to me.

The CMS does many things. One of our main attractions is our semi-annual meetings. The meetings are a great way for us to gather and exchange ideas. We exchange ideas about mathematics, ideas about math education, and the state of mathematical research in our country. But like all great things, they are not easy to achieve. It costs money to put on a meeting. We need access to a quality venue. We want AV equipment in many rooms, close to each other. We want coffee and treats. We want to be able to dispose of our trash into containers that are not overflowing. We want there to be a good schedule, that is posted in advance. We want to be told where to stay nearby, and how to get there. At a small meeting, maybe you can get a free room on the weekend that nobody is using. You grab some cookies and a fruit platter from the grocery store. You buy some coffee pods and folks stand in a short line to use the machine in the break room. Nobody notices that you filled all the garbage bins to the brim on a Saturday. You're all in the one room, everyone knows each other, so there's no need for nametags or a well organized schedule. But this is all completely different at our large scale CMS meetings! The logistics are complicated, and we need to pay staff to arrange it. We need to have the food delivered. We need to pay for rooms. We need to pay for AV rental. We even need to pay for garbage removal. But it is worth it. It is worth it to have a meeting where we all come together. Where each of our organizational loads is small, because the CMS has taken care of the logistics. Where we have advertising to make sure everyone is aware of what is going on, so that those we didn't realize were interested can get to know us and exchange ideas with us. So next time you think: "Why should I have to pay a registration fee, I'm a speaker?" Or: "Why should I have to pay a registration fee, I'm an organizer?" Or: "Why should I have to pay a registration fee, I'm not even speaking or organizing; I'm just sitting in on a few talks and only grabbed a cookie when they were about to throw them out?" Please also reflect: If the speakers, organizers and people who aren't speakers or organizers all don't pay, then how will the meetings keep happening? Of course, the CMS gets sponsorships whenever possible, but it is also important to keep our independence from our sponsors, so that we can choose how to run our meetings, and what we discuss.

Another of the CMS's more visible endeavors is our commitment to mathematical outreach. We do a great job with our math contests and math camps, and we were able to get support from the Intact Foundation to keep our Crux Mathematicorum going as a free online publication. However, exposing young Canadians from around the country to high level mathematics remains a challenge. My kids are currently elementary school students in Ontario. They no longer run math contests through their school. High school math has been de-streamed in grade 9. Of course, for my own kids, I can certainly download materials from the internet, and sign them up for external math contests. But what about the kids whose parents don't know where to look, or don't have the time? How will kids get noticed in a high school classroom, where the teacher is struggling with kids at all different levels? As a community of mathematicians, it falls to us to brainstorm how it can be done better. How do we achieve equitable access to excellence? How do we make sure that it's not too late for one child to catch on to math, without holding another child back? Working together, I

hope we can come up with various options for programs that teachers, parents, or other interested parties can run through their schools in a way that's manageable for them.

As I have mentioned, I have very much enjoyed my involvement with the CMS over the years, and mainly getting to know and work with many different people from across the country. Already, having been announced as President-Elect at the recent Ottawa meeting, many of you have introduced yourselves and shared your thoughts and concerns about a variety of issues. I'm looking forward to getting to know more of you over the coming years, and working together to share the beauty of mathematics, at all levels, with as many people as possible, while also encouraging excellence and cutting edge breakthroughs in our subject.

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