Mark Lewis (University of Alberta)

CMS President

Dear members of the Canadian mathematical community,

I greet you warmly and wish you the best as you navigate this interesting year of 2020. This is the end of my term as President of the Canadian Mathematical Society (CMS). It has been a great pleasure to serve the community in this role. I have learned a great deal about the quality and diversity of our Canadian mathematical community, and my time as President has been rewarding personally. Indeed, it has been a great pleasure to work with a group of highly motivated, hardworking individuals, both in the CMS administrative office and outside of it, as we have moved forward on shared goals. We are truly fortunate to have a cadre of staff and volunteers who are dedicated to serving mathematics in Canada, and they are crucial to making the ideas, initiatives, and resources a reality.

We live in interesting times. The mathematical landscape is changing quickly in many ways that I will attempt to describe below. Also, the recent emergence of COVID-19 has affected every aspect of the CMS and its operations. More on this to come.

One of the biggest changes during my tenure was the hiring of Executive Director Dr. Termeh Kousha, who started in September 2018. She came from the University of Ottawa, with an outstanding record of teaching and education. She has grown into her role of Executive Director and has put her stamp on the CMS, bringing forward many new ideas and finding new efficiencies in our operations. She has considerably improved our budgetary situation, putting us on a solid foundation to deal with the financial shocks we are now facing from COVID-19. It has been a great pleasure to work with her.

During the last two years the CMS has strongly focused on promoting equity, diversity, and inclusiveness at all levels. This includes developing two new committees that are essential to the future of the CMS. Following on from the report from the Truth and Reconciliation Commission of Canada, we developed terms of reference for a new Reconciliation in Mathematics Committee and are in the process of forming the committee. This committee is responsible for (i) coordinating the contributions of the mathematical community to the reconciliation process, and (ii) devising a strategy to eliminate educational and employment gaps in mathematics between Indigenous and non-Indigenous Canadians. Recognizing that diversity takes many forms, we also have a new Committee on Equity, Diversity and Inclusiveness. I am happy to say that we had our first Equity and Diversity Lunch during our Summer 2019 Meeting in Regina and our first LGBTQ lunch during our Winter 2019 meeting in Toronto.

In terms of making CMS meetings as open and accessible as possible, we have a new policy for child-care, which commits to providing this essential service at summer and winter meetings. We also have a new code of conduct, focusing on the highest standard of conduct, fairness, and integrity in all activities, including semi-annual and other meetings. Many of the developments and events listed here were long overdue, and I am happy they have become a reality with the help of the Executive Committee as well as regular CMS members, who provided constant support and assistance to do more, and I give them a heart-felt thank you. I feel like my role as President has been very much to help facilitate the vision provided by these highly motivated individuals.

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Another area of change has been with respect to developing and implementing a new CMS Fellows Program. The Fellows Program was instituted to recognize mathematicians who have made very significant contributions to the profession and to the Canadian Mathematical Society. The Fellowship recognizes CMS members who have made excellent contributions to mathematical research, teaching, or exposition as well as having distinguished themselves in serving Canada's mathematical community. It was a great personal pleasure to help recognize the 60 inaugural CMS Fellows welcomed at the Winter Meeting Banquets in December 2018 and 2019, and I look forward to seeing more new fellows at meetings to come (whether in person or virtual).

Each year the CMS has the opportunity to recognize outstanding research, teaching and service in mathematics across Canada by presenting awards. These included the 2019 Graham Wright Award for Distinguished Service to Karl Dilcher (Dalhousie), the 2019 G. de B. Robinson Award for publication of excellent papers to Lars Louder (University College London) and Henry Wilton (University of Cambridge), the 2019 Adrien Pouliot Award for mathematics education to Tiina Hohn (MacEwan), the 2020 Doctoral prize to Duncan Dauvergne (Princeton), the 2020 Coxeter-James Prize for young mathematical researchers to Jacopo De Simoi (Toronto), the 2020 Krieger-Nelson Award for outstanding contributions in the area of mathematical research by a female mathematician to Sujatha Ramdorai (UBC), the 2020 CMS Excellence in Teaching Award to Joseph Khoury (Ottawa), and the 2020 Jeffery-Williams Prize for outstanding contributions to mathematical research to Juncheng Wei (UBC). I am proud to congratulate this amazing group for their inspiring contributions to mathematics in Canada.

As government officials try to develop policy for battling COVID-19, the role of mathematical modelling has come to the fore. Models are needed to predict possible outcomes long before the data is in. For example, the need for social distancing and its impact on infectious outcomes has been analysed mathematically, providing guidance for policy makers. During the pandemic, mathematical models are being broadly integrated into the public discussion. This has been exciting to witness, but it is unusual to see mathematics play such a central role in broader society. Indeed, because of its highly technical nature, the importance of mathematics has often remained unrecognized. Too often the power of mathematics to effect change in business, communication, humanities, industry, science and technology is hidden from view and we need to do more to communicate the value of the subject we love. Because of this, I am very happy to share news of the new MITACS Innovation Lecture, to be held yearly at the CMS Winter Meeting, starting in Winter 2020. With generous support from MITACS, the purpose of the lecture is to illuminate the mathematical underpinnings of significant new innovative developments that are impacting our world and the way we relate to it. This lecture is meant for the public, for general academics, and for mathematicians at all stages and from all backgrounds.

The current COVID-19 pandemic has forced the CMS to re-evaluate and readjust every aspect of its operations. Office staff are now working from home. While we had an amazing line-up for our summer 2020 meeting in Ottawa, designed to celebrate the 75th anniversary of the CMS, we will have to wait until next year before celebrating: the meeting has now been postponed to 2021. We are also currently working with the Scientific Directors of the Winter 2020 Meeting (Montreal) to adjust the structure to our new COVID-19 reality.

In June 2020, Prof. Javad Mashreghi (Laval) will take the reins of the CMS as my term comes to an end. I have worked closely with him over the last few years and am confident in saying that I could not leave things in better hands. I thank all CMS members for having given me the opportunity to serve and wish all a happy and healthy remainder of 2020.