

## Part II

0. **Institution Name:** University of Western Ontario (UWO)

### 1. What is your vision for the conference?

The organizing committee's vision for a 2019 CUMC at UWO is to inspire undergraduate math students to pursue math by exposing them to new and interesting math and math-related topics at various levels. In order to maximize participation and build a strong sense of camaraderie, we will emphasize the non-competitiveness of the CUMC, by congratulating all speakers and not selecting certain presentations for awards. We believe it is of paramount importance that every math student can benefit from CUMC, and as such, we guarantee that the conference and all related communications will be fully bilingual in every aspect. To ensure this, the organizing committee has already selected a volunteer who is fluent in French to double-check the translations performed by the Translator. In particular, we believe that keynote lectures should be accessible to both anglophones and francophones, and so we will hold all keynote talks in a large room with two projector screens, so that each keynote lecture can be accompanied by slides in both English and French, translated by the Translator. In addition, we will schedule the talks so that no two talks in French occur at the same time, to allow francophone students to attend all talks that are in French. To further engage francophone students, we will ensure that at least two of the keynote talks are given in French. In line with our goal of accessibility, we will ensure that all events are held in locations that are wheelchair-accessible.

To build a strong sense of community among math students, we will hold many social events, where the emphasis will always be on getting to know the other attendees. Part of our vision for 2019 CUMC is to broaden the horizons of our attendees, which we plan to do by including keynote talks, and encouraging student talks, on math-related areas. In addition, we plan to include tours of facilities where hands-on, math-related research is being performed. Finally, in order to emphasize the importance of math to the attendees, and to help them plan for their future, we will include a session regarding the transition from

undergraduate mathematics to graduate mathematics, and a session regarding careers in math.

**2. Which aspects of the CUMC do you think work particularly well and would continue to be included in your iteration of the conference?**

In order to determine which parts of past editions of the CUMC were helpful and should therefore be continued, we consulted attendees of past editions. In past years, no more than four talks were held at a time, which minimized potential conflicts between talks, and would be continued at a UWO edition of the CUMC. In addition, for planning purposes, we will include a “suggested background” section with the abstract of each talk, in order to help students plan which talks to attend. At the 2018 edition of the conference, the tour of the Synchrotron was fascinating and exhibited an inspiring application of modern mathematics. We will include such connections to other fields of study if the 2019 CUMC is held at UWO. On a related note, many students found the “Academia and Industry” panel at CUMC 2018 to be very helpful and informative, and so a similar panel would be held at UWO in 2019. As in past conferences, we plan to use residences for accommodation, as they are relatively inexpensive and are very close to the lecture halls, making them convenient for attendees. Finally, we plan to continue using different colours of T-shirts to distinguish organizers from attendees, as this has proved effective in past conferences.

**3. Which aspects of the CUMC would you improve upon and how? Are there any new ideas that you would like to bring to the conference?**

In order to determine which parts of past editions of the CUMC could be improved and how to do so, we consulted attendees of past editions. Students we consulted stated that it would be helpful to re-introduce two length of talks, such as 25 minutes and 55 minutes, as some speakers at past editions were unable to accomplish what they intended to in the designated period of time. Discussions of futures in mathematics have been helpful at past editions of the CUMC, but we would like to hold separate, non-conflicting panels for careers in academia and careers in industry. Students often find the transition from undergraduate

mathematics to graduate mathematics to be difficult, and we believe a dedicated panel on this topic would be invaluable to attendees. To facilitate the operation of the conference, we will make the President's contact information, including his cell number, publicly available so that immediate assistance is available throughout the conference. Navigation has proved to be difficult at past editions of the CUMC, so to facilitate navigation at UWO, navigation would be supported not only by maps and signage, but also but dynamic online directions from the site [classfind.com](http://classfind.com).

We would also like to continue to improve the social aspects of the CUMC by holding frequent socials - on the nights of Thursday, July 4 and Friday, July 5; and possibly on Saturday afternoon before the closing banquet, subject to time constraints. We will ensure that no more than one activity is held at a time, and will hold structured activities rather than having attendees explore the town themselves, so that all attendees have the chance to get to know each other. Additionally, we will increase the social aspect of these activities, by organizing "ice-breakers" and other activities aimed at building camaraderie. Finally, we would seek to increase the number of local professors present at the welcome and closing events as compared with the 2018 CUMC, in order to make the attendees feel even more welcome.

#### **4. What are your proposed dates for the conference and why?**

Our proposed dates for the conference are July 3-7, 2019. We plan to begin the conference in the late afternoon of the first day, and to end the conference in the early afternoon of the last day, in order to allow for travel time. This choice of dates would be effective because this period does not conflict with final exams for summer school courses at most Canadian universities, and because running the conference from a Wednesday to a Sunday will minimize the amount of work and school students and professors would need to miss in order to attend. Furthermore, these dates have been selected to minimize conflict with convocation ceremonies, and they do not conflict with any other undergraduate math conferences in Canada, any CMS events, or any holidays. Moreover, these dates ensure that students performing research through the entire summer have

completed at least two months of research, which will make it easier for them to present a talk on their research. In addition, there is significant appeal to host the conference at this time because of local events. Most notably, Sunfest London is tentatively scheduled to be held that weekend, and is a massive four-day multicultural celebration that draws over 100,000 attendees each year. Finally, these dates have been verified with the Department of Mathematics and the Department of Applied Mathematics at UWO to ensure that they will not conflict with other events scheduled at UWO.

**5. What are the unique aspects of your proposed conference location (institution, city, etc), that would add to the conference experience and why?**

One of the distinct advantages of UWO is that it is one of the most large and beautiful campuses in the country. It is decorated throughout with large areas of forests and green spaces, making it an ideal choice for a tour or to relax in. Furthermore, the large amounts of green space would make for a fantastic barbeque for lunch on one of the main days of the conference. In addition, UWO is a historic campus, dating back to 1878, and includes a breathtaking combination of old-style and new-style architecture. One particularly impressive example of this is The Great Hall, which is an impactful dining hall located in one of UWO's oldest buildings, and would be a perfect place to host the opening banquet. Moreover, UWO has an abundance of lecture halls designed with cutting-edge efficiency and outstanding technology, which make for effective talks of all sizes. Another advantage that UWO has to offer is that it has large groups of researchers and top-of-the-line research facilities for multiple fields related to mathematics, such as medicine and engineering. For example, UWO contains one of the country's largest medical schools, the Robarts Research Institute, a wind tunnel for engineering research, and the WindEEE Dome, which is a one-of-a-kind simulator for tornadoes and other winds. These facilities would make for fascinating math-related tours or interdisciplinary keynote lectures.

UWO is located in London, Ontario, nicknamed "The Forest City" for its

imposing expanse of forestry across the city. If UWO is selected for the 2019 CUMC, the activities for the conference will definitely include a visit to one of its beautiful forested areas, such as Springbank Park. In addition, in the summer, London's downtown becomes a vibrant centre of countless festivals and other activities. Its Richmond Row contains a wide selection of restaurants, stores, and entertainment venues; its Covent Garden Market hosts a variety of unique stores and eateries; and its Victoria Park is a prime location for relaxation, and holds some of the most exciting events in Canada, such as Sunfest London.

**6. How will you do your best to ensure the conference attracts as many attendees as in the past or more?**

One of the main ways in which the organizing committee plans to keep enrolment high is by minimizing the registration fee by budgeting very frugally while at the same time making sure that the attendees have an enjoyable experience that includes unique and entertaining activities. One way in which the organizing committee plans to do this is by hold all talks on UWO campus and to use UWO equipment for all talks, in order to avoid reservation and rental fees whenever possible. Moreover, we hope that our selection of dates (as detailed in Question 4) will be favourable to potential attendees, as it has been checked scrupulously to make it as convenient as possible for undergraduate students and professors to attend. Furthermore, although overlapping talks will be necessary in order to fit all the talks into five days, we plan to schedule these talks carefully, so that there are no talks on the same area of math occurring at the same time, and so that there are no talks by students from the same university at the same time. In addition, we plan to synchronize the breaks between talks in each block so that it is possible to move from one talk to the next without missing part of either talk or having to wait for more than five minutes. We hope that our careful scheduling of events will be an incentive for students to attend the CUMC, particularly because our scheduling will make it easy for a student to attend all talks on their topic of choice.

To maximize attendance, we will communicate with potential attendees using various means, such as email, social media, and our website. Our website and

social media will be set up early and updated regularly, in order to keep students informed of, and interested in, the CUMC. We will check our CUMC email account often, and will send an email to students early in the year, and provide a reminder email later in the year, to ensure that they have sufficient planning time and do not forget about the conference. Furthermore, we will send out our CUMC poster very early in 2019, and will contact departments and clubs directly, in order to maximize our chances of reaching students. We will also contact previous attendees, as this is one of the most effective ways of increasing attendance, and these students are more likely to give talks than are other attendees. To ensure that we reach all Canadians, we will ensure that all communications are provided in both English and French, and we will proofread all of our translations carefully. We will make sure to emphasize the most interesting parts of the conference in our communications, in order to draw students in, and we will make registration as easy as possible to encourage students to enrol. Finally, subject to the limits of our budget, we wish to provide as many travel and accommodation subsidies as possible, to minimize the financial disincentives students face when considering attending CUMC.