Report on the 47th International Mathematical Olympiad in Ljubljana, Slovenia (July 6 – 18, 2006)

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The International Mathematical Olympiad (IMO) is one of the most prestigious mathematical events for high school students. This competition is hosted by a different country every year, and this year, we had the chance of visiting the small beautiful nation of Slovenia. About five hundred students from ninety countries attended this year's IMO, making it one of the largest IMOs ever held. And since each country was allowed to send at most six contestants, only the strongest students from each country could come to this event. It was an honour for me to participate in IMO 2006 as a contestant, and I had a very memorable experience in Slovenia.

When I was much younger, I had always dreamed of competing in an event like the IMO. After years of practice, I was selected to represent Canada in IMO 2004 in Athens, Greece. Needless to say, I was ecstatic two years ago when I received the phone call inviting me to be on the team. I have participated in every IMO since then, and they have all given me incredible experiences. I had the chance to travel around the world and meet students with similar interests from other countries. The IMOs left me with great memories and lasting friendships. IMO 2006 was my third and last IMO as a contestant. It is significant for me as it is a finale to my unforgettable journey as a math olympian.

In Canada, in order to qualify for the six-member Canadian IMO team, one needs to perform very well on the following three olympiads: Canadian Math Olympiad, Asian Pacific Math Olympiad, and USA Math Olympiad.

Although a significant portion of our training consists of working by ourselves throughout the year on practice problems, the Canadian Math Society organizes a couple of intensive training camps every year. The Winter Olympiad Training camp is held in York University every January. It lasts about a week and brings together fifteen students who are most likely to make the IMO team that year. And, after the team has been chosen, there is a two-week long summer training camp for the IMO team right before the actual competition. The atmosphere provided by these camps allows us to focus on mathematics and work with other enthusiastic students towards a common goal. The camps are always a lot of fun too!

This summer's training camp was divided into two halves: we spent the first week in Halifax, and the second week in Bohinj, Slovenia. During the first few days of the camp in Halifax, a number of local students were invited, so that they too could experience what IMO training was about. On most days, we had a lecture in the morning, a problem session or contest in the afternoon, and student presentations in the evening. The evenings were often quite entertaining, as some team members have rather hilarious presentation styles.

We spent Canada Day relaxing and touring around Halifax, and we departed for Slovenia the day after. In Slovenia, we stayed at a hostel about two hours away from Ljubljana, and spent a week there training along with the Swedish team as well as the Luxembourg team. The accommodations were comfortable. On the plus side, since we were stuck in the middle of nowhere with no television or internet, we were able to concentrate on training for the upcoming contest – which was the purpose of this camp.

After a week of additional training, we were transferred to the IMO competition site in Ljubljana, the capital of Slovenia. The planning for this year's IMO was very well done. A lot of activities were available near the IMO site, and internet access was easy to find. As well, there were a number of organized events such as sports tournaments. We could always find something to do during our free time.

After arriving at the IMO site, we met our guide Dejan Širaj, who showed us around Ljubljana. With so many other students around us, we made many new friends. We chatted and played games together, and everyone got along very well.

The opening ceremony took place on the day after we arrived in Ljubljana, and the two days of examinations followed thereafter. IMO consisted of two 4.5-hour exams, and on each day we were given three difficult problems requiring proofs. We needed to use creative approaches and make clever observations, as well as to communicate our thoughts on paper in a coherent manner. After the exams, our leaders would argue for our points based on what we have handed in.

For those who are interested, the problems and solutions of this year's IMO could be found on the official website: http://imo2006.dmfa.si/. This site was maintained very well during the event – photos and news updates were uploaded everyday.

As we would all agree, the best part of IMO comes after the exams. We were given the chance to relax and enjoy Slovenia, and we went on several organized excursions. We went to caves, beaches, and mountains, and had picnics, barbeques, and lots and lots of ice cream. During the nights, many contestants went to explore the city and experience the Slovenian nightlife. We all had lots of fun.

In the meantime, the leaders and deputy leaders were trying to argue for their students' papers in coordination sessions. Back in our residence, we saw partial results slowly updated on the bulletin board, allowing us to predict our medal standings. In the IMO, medals are only given to the top half of the students, and the numbers of gold, silver, and bronze medals are in the ratio of 1:2:3. It was a stressful time for those contestants who may be near the cutoffs, as even a single point could make a difference in the colour of their medal.

Eventually, we found out all the scores as well as the official medal cutoffs. Team Canada received five silver medals and one bronze medal. Our team ranked fifteenth in the unofficial country rankings. We were quite happy about our performance on this very

difficult examination. On the last day before departure, we received our medals at the closing ceremony, and had a large celebration banquet afterwards.

The IMO has been an incredible experience, and it would not have been possible for us without the support of the Canadian Math Society and its sponsors such as the Samuel Beatty Fund. As well, the help and support from our parents, teachers, coaches and teammates have all been instrumental. Thank you all for making it possible for us to go to the IMO and enjoy this unique wonderful experience.