

## MATH TEAM CANADA

$\qquad$

Team Member Bio Booklet



# NG $_{\text {G }} 2016$ 

The six Canadian high schools students who will be competing for academic excellence at the 57th International Mathematical Olympiad this summer in Hong Kong have been announced.
The International Mathematical Olympiad (IMO) is the world championship high school mathematics competition. The IMO began in 1959 in Romania with seven participating countries. Math Team Canada expects to compete against the world's best students from over 100 countries in the 57th IMO. Canada has earned 29 gold, 47 silver and 84 bronze medals since first competing in 1981.

For additional information regarding CMS competitions, Math Team Canada or the IMO, please contact:


CANADA


## Did

you
know?
Last year, Math Team Canada placed 9th out of 104 countries at the 56th IMO in Thailand. One team member, Alex Song, achieved a rare perfect score on the exam and was ranked as the top mathematics student in the world by the IMO Committee!

## Team Biographies

Andrew Lin
University Hill Secondary School
Vancouver, British Columbia

the Pacific Institute of Mathematical Science's ELMACON - when he was in the fourth grade. Although he did not expect to do well - the competition was meant to be a challenge and new experience - he succeeded in achieving the top score on the contest. It was at that moment that Andrew knew that he should further pursue math. "That first contest has led to new and difficult problems [for me] to solve and I have enjoyed every step of the way. It is truly exciting, albeit sometimes frustrating, to work hard on a question and to try different possibilities until finally reaching a solution," said Andrew. "I love math contests like the Canadian Open Math Competition (COMC) because the problems are challenging and exciting. I can use them to show people how math is truly about creative problem solving. They are accessible at first, but there is definitely no shortage of challenges. They have motivated me to improve my critical thinking and learn a variety of mathematical ideas." Andrew credits his invitation to participate on Math Team Canada 2016 to his continued commitment to the discovery and learning of mathematics. He notes that, "When I was younger, I only dreamed of making it to the IMO. I never expected to reach this level of math, and it still feels surreal." He considers his invitation to the team as an enormous honour and will do everything in his power to bring success to the team. Andrew's love of problem solving is not isolated to math; his passion for critical thinking has led him to develop an interest in computer programming and game theory, creative writing and performance, and politics and philosophy. Now that he has qualified for the IMO, his new dream is simple: he hopes that he to get to solve problems and think creatively for the rest of his life.

Qi Qi
Phillips Exeter Academy
New Hampshire, USA


QiQiwasbornin Shaoxing
China and immigrated to Canada in the sixth grade. She has been attenting Phillips Exeter Academy in New Hampshire since 2014 and is currently in the eleventh grade. became interested competition math sometime in elementary school and has participated in various North American and international math contests since she was in the seventh grade. Qi enjoys math due to the creative competition that math problems demand and the sense of accomplishment upon solving a difficult problem. This is her first time participating in the International Mathematical Olympiad (IMO), and she is both honoured and nervous. In the past three years, she earned two bronze medals and one silver medal at the Asia Pacific Mathematical Olympiad. She will continue to work hard, and hopes to achieve good results at the IMO to make Canada proud. In her free time (which is somewhat rare at Phillips Exeter), Qi enjoys programming, doing puzzles, listening to music and singing.

## Kai Sun

A.B. Lucas Secondary School

London, Ontario

3.1415926535897

Kai was born in London, Ontario and is currently a grade 10 student at A.B. Lucas Secondary School. Kai first became interested in math when he was in the third grade. He had just joined the math program 'Math Challenge at Western' and met Mr. T Tom Griffiths, who was the first to teach him mathematical strategies, and has since helped him in achieving many goals. The math program demonstrated the beauty and ingenuity of mathematics and motivated Kai to pursue math and solve even harder problems. Thanks to his early start
with math contests in grade four, he was able to he was able to rise to the advanced and challenging Olympiad level over the years. Reaching the Olympiad level in math has been like reaching a whole new universe, with even more phenomenal problems and tricks to discover. "It is atruehonortobe selected as one of the sixCanadians to represent Canada at the 2016 International Math Olympiad. I have prepared for this moment for many years and I am continuing to work hard to represent Canada well in the IMO, so this really is a dream come true," said Kai, when asked about how it feels to have been selected as a member of Math Team Canada. CMS competitions and particularly, the Canadian Math Olympiad (CMO) have motivated Kai in his high school journey and showed him the beauty and creativity of Olympiad-level math. According to Kai, CMS competitions are geared towards high school students and include complex post-secondary level questions and logic, so the variety of problems and the clever tricks that the contests have taught him are far greater and far more beautiful than he has ever seen before. Kai enjoys solving extremely challenging math and physics problems, playing chess, playing the piano, reading fictional novels, and playing basketball. His favorite place in Canada is Banff, Alberta, with its phenomenal scenery, relaxing hot springs, fancy restaurants, and calm and peaceful environment.

## Kevin Sun

Phillips Exeter Academy
New Hampshire, USA


This is Kevin's fourth year as a member of Math Team Canada. The 17 -year-old was born in New Brunswick and is a grade 12 student at Phillips Exeter Academy in New Hampshire, USA. Kevin became interested in mathematics at an early age. He started doing math competitions in grade six and began competing in Olympiad-level math in grade eight. "It is a great honour to be representing Canada at the IMO again," said Kevin. "I hope I can help our team achieve good results at the IMO. In the months before IMO , I will train considerably and hopefully be able to improve our team's performance." After completing high school, Kevin hopes to
attend university and study math or science and wants to pursue a math-related career in the future. Kevin looks forward to bonding with the other members of Math Team Canada, meeting the international teams and discussing math with IMO participants. His hobbies include programming, doing logic puzzles, and participating in puzzle hunts. Kevin's favourite place in Canada is Banff, Alberta, where the Summer IMO Training Camp is held each June.

## Ruizhou Wang

University Hill Secondary School
Vancouver, British Columbia


Ruizhou Yang was born In Changchun, China in 1999. In 2013, he moved to Canada with parents. He is currently in 11 studying at University Secondary School. Ever since he can remember, Ruizhou had been interested mathematics and the logic that
it entailed. His odyssey with math started at the age of five. While his peers ran after ice cream trucks and watched Tom and Jerry, Ruizhou looked forward to mathematics competitions. In 2009, he entered his first math competition, the Elementary Mathematics International Contest (EMIC), in Iloilo City, Philippines and received a Silver Medal. The next year, when he was in grade 6, Ruizhou competed in the 2010 EIMC in Incheon, Korea and got the highest score in Silver Medal. In grade 7, he started studying Olympiad mathematics and got a perfect score in the Chinese National Junior High School Mathematics Competition in the same year. Upon moving to Canada in grade 9, Ruizhou received Honours in both the Canadian Open Mathematics Challenge (COMC) and the Asia Pacific Mathematical Olympiad (APMO), and was selected as a member of Math Team Canada 2014. In grade 10, he received an Honourable Mention in the COMC (first place student in grade 10) and earned first place in the Canadian Senior Math Contest. This year, Ruizhou received second place in the COMC (first place student in grade 11), a bronze medal in the APMO, and Honourable Mention in the Canadian Mathematical Olympiad (CMO). According to Ruizhou, "I enjoy the logical flow and the comprehensiveness of the questions in the CMO. For example, the third algebra question can be solved by trivial polynomial factoring even
though the question seems convoluted at first glance." "Iamhonoured torepresentCanadain2016International Mathematical Olympiad," beamed Ruizhou. "I will keep up my efforts and try my best in IMO." Besides pursuing his love for math, he is also a member of the University Hill Senior Badminton Team. He enjoys playing sports, travelling and watching movies in his spare time.

William Zhao

Richmond Hill High School<br>Richmond Hill, Ontario




Even nowthatheisinhigh school, he enjoys reading about the history and development of mathematics like some people would enjoy magic. He was a participant in the 2012, 2014 and 2015 Canadian Open Mathematical Challenge (COMC) and has competed in the Canadian Mathematical Olympiad (CMO) for the past two years. This year, he received a Silver Award in the CMO and 3rd place in the Asia Pacific Mathematical Olympiad. He is looking forward to being on Math Team Canada at the 57th IMO and is hoping to get a good score. In his spare time, William likes to mess around with his graphing software to try to make new geometry questions. Of course, critical-thinking isn't always fun, so to relax William enjoys playing extended rounds of the mathematics game 'Make 24'. He enjoys computer programming when time permits and learned Java online when he was 12 . His hobbies include sports like table tennis and basketball. William hasn't yet decided on which university he would like to attend in the comingyears, buthe does want to earn a PhD in math before he turns 25 . His dream is to create something new and important in mathematics, which he believes is the only correct use his mathematical talent.

## Team Leaders

Trainers of Math Team Canada 2016

## Robert Morewood <br> Team Leader

An alumni of Canada's 1980 summer training
camp (a practice run the year before Canada first participated in the IMO), Robert has since helped train many of Canada's teams, and first represented Canada on the IMO Jury in Slovenia (2006).
He has found that good contest problems can be
a wonderful inspirational tool when working with students at all levels.
With a mix of experience and newcomers, he looks forward to seeing what this year's team can do.

## Hunter Spink

## Deputy Team Leader

Hunter participated in the IMO for team Canada from 2009 to 2011 and is currently a graduate student at Harvard University. According to Hunter, "Being on team Canada has opened more doors in my life than any other. By helping train and accompany this year's IMO team in Hong Kong, I hope to repay some of the kindness the CMS and all of the volunteers who help run the Canadian IMO team gave me all those years ago."

## Patrick Lopatto

Observer
Patrick is currently a graduate student in mathematics at Harvard University studying probability theory. He was born and raised in Grinnell, Iowa, and attended Washington University in St. Louis for college, earning $A B$ and $A M$ degrees in mathematics. In his spare time, he enjoys reading and playing board games with his fellow graduate students.


