Get Involved

Student Groups

Contributor: Jenna Tichon

In any math department you will find a strong divide between two types of people: those who take their courses, and those who take their math to heart. After two years of serving as president for my university's students' association I believe the difference can be summed up in one word: involvement. We are interested, we are passionate, we want to participate, and there is no better way to do that than via student groups.

Student groups thrive when communication and publicity are a top priority throughout the year. Having a room is a great start, but for shy students this could be intimidating. A bulletin board is a fabulous way to post calendars and notices of upcoming talks and opportunities. This way, students have access to information at any time. Also, a mailing list is an efficient way to get news out and to track membership. For the web savvy, you will find links to web pages for math clubs across the country on our website: www.cms.math.ca/Students/Area Most importantly, never forget the value of word of mouth.

A personal invitation by a senior student is often the most encouraging way to get new students to try out an event.

Join us in our latest initiative by contributing to our web forum. www.studc.com/forum A new web community has been launched with various sections for discussion of topics important to students. The experience is always what you make of it so get involved!

AWM Essay Contest: Biographies of Contemporary Women in Mathematics

Contributor: Laura Gauthier

To increase awareness of women's ongoing contributions to the mathematical sciences, the Association for Women in Mathematics (AWM) is sponsoring an essay contest for biographies of contemporary women mathematicians and statisticians in academic, industrial, and government careers. The essays will be based primarily on an interview with a woman currently working in a mathematical sciences career. http://www.awm-math.org/

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Uniting Canada's Mathematical Community

Contributor: Jessica McDonald

Attending a CMS meeting as a student is a fun and exciting way to connect with other students and professors across the country and learn about new research developments. Studc would like to increase student participation and to enhance the experience for those who dare to attend.

The next CMS meeting will take place at the University of Toronto on December 9-11. To increase the student-oriented programming this year, Studc has organized a panel event specifically for students at this meeting. Continued on page 2.

Chairs Report

Contributor: Joy Abramson

This year has been an exciting one for the Student Committee. We have started several exciting new projects to announce in addition to improving our existing projects.

• Our student social on the Friday night of each CMS meeting continues to be a great success. See you in Toronto meeting in December 2006!

• Our brand new web forum is designed to help math students communicate better across the country. It is available to you at: www.studc.com/forum

• Our two email listservs, graduate and undergraduate, send announcements to mathematics students across Canada. Sign up now on our website to stay in the loop.

• Student memberships in the CMS are even more attractive this year, with **free autographed books to 50 members**, and a free subscription to the CMS problem-solving journal, Crux. Continued on page 2.

Contribute to our Next Newsletter

Would you like to see your article featured in the spring edition of our newsletter? We will select the best piece for publication, and the author will receive an autographed copy of "The Education of a Mathematician". The deadline for this contest is January 31st 2007. Send your submissions to student-editor@cms.math.ca

Uniting Canada's Mathematical Community

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The event will take place over a lunch hour, so no other talks need be missed to attend. Studc also organizes a student social on the Friday night of CMS conferences. It is a positive event encouraging students from across the country to get to know one another in a casual atmosphere. It is also a student specific activity, making it that much more fun. For more information go to: www.cms.math.ca/Events

Do you have any ideas on how to improve the student experience at future CMS meetings? What might encourage you to attend for the first time? Send suggestions to: student-editor@cms.math.ca

Chairs Report

(Continued from page 1)

- The 13th CUMC at McGill University was a great success. The 14th CUMC will be held next summer at Simon Fraser University.

- Our website has had major updates in the past year! Check out pictures and bios of everyone on the Student Committee, as well as a guide to getting the most out of attending a conference.

- Our semiannual student newsletter contains important information for Canadian mathematics students.

We would also like to thank the members who left us in the past year: Dan Pollock, Desmond Leung, and Nithum Thain. At the same time, we are pleased to welcome four new members to Studc: Jenna Tichon, Jessica McDonald, Laura Gauthier, Mélisande Fortin Boisvert and Pawel Gladki.

Digitized Math Works

Contributor: M. E. Barnes

Living on a tight budget? The Digital mathematics Library contains links to over 2163 digitized books and over 167 digitized journals. You can browse by author or tile and save on textbooks. This site and other digitization projects are a boon to those seeking primary sources, especially older ones. www.mathematik.unibielefeld.de/~rehmann/DML

Another site to check out is the text section of the Internet Archive where you can access a growing collection of digitized math works. www.archive.org/details/texts

Bookmark these sites today!

In The News

Russian Turns down Million Dollar Prize

Source: Telegraph.co.uk by Harry Mount in New York

An eccentric Russian genius who solved one of the world's trickiest maths problems has turned down the mathematics equivalent of a Nobel Prize and another award worth a million dollars.

Experts agree that Grigory Perelman, of St Petersburg, cracked the century-old Poincaré Conjecture in 2002. The Poincaré Conjecture was posed by the French mathematician, Jules Henri Poincaré, in 1904. It seeks to understand the shape of the universe by explaining the relationship between shapes, spaces and surfaces.

Perelman was set to win a Fields Medal, the ultimate maths prize, awarded every four years by the executive committee of the International Mathematical Union at Princeton University. Surprisingly, Dr Perelman is not interested in prizes. This is the last year that Dr Perelman, who turned 40 in June, can claim the Fields prize; open only to mathematicians under 40.

Dr Perelman was a child prodigy, trained at a St Petersburg school devoted to maths and physics. At 16 he achieved a gold medal with the perfect score at the 1982 International Mathematical Olympiad.

What's New at Waterloo

Contributor: Jessica McDonald

Waterloo has been selected to host the International Olympiad of Informatics, an international competition for top high school students in computer science in 2010. It will be the first time the IOI has taken place in Canada with more than 500 people from over 80 countries expected to take part.

Recent PhD recipient Michael Newman was awarded the 2006 CMS Doctoral Prize by the Canadian Mathematical Society. The Prize recognizes outstanding performance by a doctoral student who graduated from a Canadian university. Newman was a student in the department of Combinatorics and Optimization, and was supervised by Christopher Godsil. His dissertation presents extensions and applications of the Delsarte-Hoffman bound on the size of independent sets in graphs. He will present the 2006 Doctoral Prize lecture at the CMS Winter Meeting, hosted by the University of Toronto in December 2006.

In The News - Feature

Robert Barrington Leigh R.I.P

Contributor: L. Chindelevitch

On August 13th, Robert Barrington Leigh, a 20-year-old student in his final year of undergraduate studies at the University of Toronto, went missing. A search party was organized for him in Edmonton, where he was last seen leaving for the Edmonton Folk Music Festival. On August 22nd, his body was found in the North Saskatchewan River. An autopsy has confirmed that his death was not the result of violence.

The departments of mathematics and physics at the University of Toronto have created memorial funds in his name. An online memorial has also been made available at:

www.student.math.uwaterloo.ca/~rfurmani//rbl/guestbook.cgi

Such are the facts, but these simple facts are no testament to Robert's outstanding life, during which he managed so many impressive achievements. I met Robert at the CMS Winter Training Camp in 2002. What struck me most was his friendliness and modesty. I was not surprised to learn that Robert went on to participate in the IMO (International Math Olympiad) with the Canadian team where he won a bronze medal.

Robert's talents were not limited to mathematics however. He also participated in the International Physics Olympiad winning a silver medal! In university, he took part in the computing competition known as ACM, as well as the famous Putnam exam.

Robert had a keen interest in mathematical problems of all kinds. He gave an interesting presentation on triangular lattices and coverings at the 2006 CUMC, and he was also one of the most active solvers of the problem sets prepared for participants. Robert was very eager to share his passion for mathematics with others, and was always ready to help those who needed it.

There are no words to describe the tragedy that is Robert's death is to our mathematical community, especially to those who knew him. My sympathies extend to his parents, his three siblings, and his girlfriend. May he rest in peace!

Grad News: The Student Advisory Committee (SAC) of MITACS

Contributor: Sandra Gregov

The Student Advisory Committee (SAC) represents graduate and post-doctoral students within MITACS (Mathematics of Information Technology and Complex Systems). SAC publishes a student newsletter *Student Notes* with articles on events, interviews from students on their research, interviews from the industry sector, etc. Student Notes can be downloaded from the MITACS website.

There are many funding opportunities through MITACS and SAC for students. The Mobility Fund provides financial assistance allowing students to travel and present their research. The Internship Program connects students with non-academic organizations providing students with funding to do research for the organization. SAC also provides up to $1000 for regional student conferences and seminars within Canada.

One of SAC's main responsibilities is organizing and promoting student social events and seminars at the MITACS Annual Conference. The next MITACS conference will be held with the CMS Summer 2007 Meeting in Winnipeg, Manitoba, May 30 to June 3. Stay tuned to the Studc website for more information, www.mitacs.math.ca/Students

There is also a MITACS Student Council with representatives from each Canadian university who work in collaboration with the SAC. To represent your university on the student council and be active within MITACS, please visit www.mitacs.ca.

The Canadian Undergraduate Math Conference

Contributor: L. Chindelevitch

The thirteenth edition of the Canadian Undergraduate Math Conference, which took place at McGill University in Montreal from July 5th to the 9th, has already come and gone. As always, the event was a success, offering to more than 130 undergraduate students from across Canada the opportunity to present and hear talks in a relaxed atmosphere. We are delighted to announce that the next edition of the conference will be held at Simon Frasier University in Vancouver. For more information please visit: www.cumc.math.ca

The Canadian Undergraduate Math Conference
(continued from page 3)

La treizième édition du Congrès Canadien des Étudiants en Mathématiques, qui a eu lieu à l'université McGill, à Montréal, du 5 au 9 juillet, est déjà chose du passé. Comme par les années précédentes, l'événement fut un grand succès, offrant à plus de cent trente étudiants du premier cycle l'opportunité de présenter et d'assister à des exposés dans une ambiance décontractée. Nous sommes heureux d'annoncer que la prochaine édition du congrès aura lieu à l'université Simon Frasier, à Vancouver. Vous trouverez plus de renseignements à propos du CCÉM au www.cumc.math.ca.

Travel Abroad With Math in Moscow

Contributor: M.E. Barnes

The Natural Sciences and Engineering Research Council in conjunction with the Canadian Mathematical Society offer scholarships to attend a semester at the small elite Moscow Independent University. Find application details at : www.cms.math.ca/bulletins/Moscow_web/

Submit Your Own Math Problem

If you would like to submit a problem of your own for publication in our upcoming Spring newsletter, then we want to hear from you. Submit your suggested problems along with solutions to student-editor@cms.math.ca

Problem Solving 101

Crux Mathematicorum

For many, problem solving is the fun part of the mathematical experience. If you like to challenge yourself and others with new and mind bending problems, then you need a copy of the Crux Mathematicorum (with Mathematical Mayhem).

Remember that students who are members of the CMS get a copy of the Crux for free!

To check out the Crux, visit: journals.cms.math.ca/CRUX

We also post problems on our website just for you. These are accessible from: www.cms.math.ca/Students

En Français

OMI 2006

Contributor: M. F. Boisvert

L'Olympiade internationale de mathématiques (OIM) est le championnat du monde de mathématiques pour les étudiants du secondaire. Du 6 au 18 juillet 2006, 498 étudiants provenant de 90 pays se sont réunis à Ljubljana, en Slovénie. Cette année, le Canada s'est classé 15e sur 90 pays et a récolté cinq médailles d'argent et une de bronze.

L'équipe canadienne était composée de Farzin Barekat (Sutherland Secondary School, North Vancouver, Colombie-Britannique), Viktoriya Krakovna (Vaughan Road Academy, Toronto, Ontario), Yang (Richard) Peng (Vaughan Road Academy, Toronto, Ontario), Dong Uk (David) Rhee (McNally High School, Edmonton, Alberta), Peng Shi (Sir John A. MacDonald Collegiate Institute, Agincourt, Ontario) et Yufei Zhao, Don Mills Collegiate Institute, Toronto (Ontario). Ils sont sélectionnés parmi plus de deux cent mille étudiants à l'aide de divers concours de mathématiques.

Lors de la compétition, chaque pays est invité à présenter jusqu'à six de ses meilleurs étudiants. Durant deux journées consécutives, les étudiants doivent tenter de résoudre six problèmes choisis parmi une liste soumise par les pays participants. Les sujets couverts sont : la théorie des nombres, l'algèbre, la combinatoire et la géométrie. Aucune connaissance des mathématiques du niveau postsecondaire n'est requise, mais il ne faut pas croire pour autant que ces problèmes sont faciles! Les médailles d'or, d'argent et de bronze sont octroyées aux étudiants ayant obtenu les 123 meilleurs résultats et le classement des pays est déterminé en additionnant les notes de chaque membre des équipes.

La 48e Olympiade internationale de mathématiques aura lieu à Hanoi, au Vietnam, en juillet 2007. La sélection de l'équipe 2007 est en cours, nous souhaitons bonne chance à tous les participants!

Pour de plus amples renseignements : www.cms.math.ca/Concours/