

Canadian Mathematical Society 2011 Annual Report



Société mathématique du Canada Rapport annuel 2011

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The Canadian Mathematical Society promotes the advancement, discovery, learning and application of mathematics.

La Société mathématique du Canada favorise l'avancement, la découverte, l'apprentissage et l'application des mathématiques.



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CANADIAN MATHEMATICAL SOCIETY

The voice of mathematics since 1945

WHY MATH

Mathematical thinking and abilities are critical success factors that fuel both national and personal prosperity. Mathematics allows economies to be understood and business sectors to function. Mathematics helps individuals understand, model, and change the world around them. Mathematics is creative. Mathematics is beautiful. Mathematics is universal. And mathematics is vitally important to the success of our nation, our enterprises, and our lives. To nurture that success, the Canadian Mathematical Society (CMS) promotes the advancement, discovery, learning and application of mathematics in Canada.

HISTORY In 1945 a group of mathematicians met in Montreal as the *Canadian Mathematical Congress.* The group's aim was to try and collectively initiate important mathematical developments in Canada. This meeting led to the development of the Canadian Mathematical Society (CMS). The CMS has since evolved into Canada's voice of mathematics as the national professional society for Canadian mathematics.

ABOUT US The CMS is all about mathematics. It's about mathematics research and discovery. It's about mathematics education and learning. It's about mathematics in daily life and in business. And it's about nurturing a strong and dynamic Canadian mathematics community from coast to coast to coast.

The CMS is a volunteer and member-based, notfor-profit, federally registered charity. The CMS membership encompasses professors, teachers, students, parents, universities, CEGEPs, colleges, schools, corporations, individuals, and other math societies from Canada and around the world. The CMS Board of Directora has representation from across Canada and CMS committees engage every manner of interest in mathematics. CMS sponsors include major corporations as well as federal and



SOCIÉTÉ MATHÉMATIQUE DU CANADA

La voix de mathématiques dépuis 1945

POURQUOI LA MATHÉMATIQUE

Une pensée mathématique et des capacités en mathématique sont des éléments de réussite essentiels pour assurer la prospérité nationale et personnelle. La mathématique permet aux économies d'être comprises et aux secteurs d'affaires de fonctionner. La mathématique aide les particuliers à comprendre, à modéliser et à changer leur univers. La mathématique est une discipline reposant sur la créativité. La mathématique est la beauté même. La mathématique est universelle. Et la mathématique est d'une importance vitale pour la réussite de notre pays et de nos entreprises et pour notre réussite personnelle. Pour favoriser cette réussite, la Société mathématique du Canada (SMC) s'est donnée pour mandat de promouvoir et de favoriser la découverte et l'apprentissage des mathématiques, et les applications qui en découlent à travers le Canada.

HISTORIQUE En 1945, un groupe de mathématiciens se sont réunis à Montréal sous le nom de *Canadian Mathematical Congress*. Le groupe souhaitait lancer les fondements d'importantes percées en mathématique au Canada. Cette rencontre a entraîné la création de la Société mathématique du Canada (SMC). La SMC est devenue la voix de la mathématique du Canada en sa qualité de société professionnelle nationale pour la mathématique au Canada.

À PROPOS DE NOUS Tout à la SMC gravite autour de la mathématique. Il est question de recherche et de découvertes en mathématique. Il est question d'enseignement et d'apprentissage de la mathématique. Il est question de mathématique au quotidien et dans le milieu des affaires. Et il est question d'appuyer une collectivité mathématique canadienne bien portante et dynamique d'un océan à l'autre.

La SMC est une œuvre charitable d'inscription

provincial governments.



WHAT WE DO The CMS promotes and publishes research. The CMS engages math educators to share experiences and best practices. The CMS provides extra-curricular learning experiences for general enrichment and advanced study. The CMS promotes mathematics to advance career aspirations. The CMS

gives voice to the Canadian mathematics community. And the CMS nurtures and celebrates Canadian math excellence on the domestic and international stage.

Much of what CMS does targets Canada's youth. CMS develops and holds math competitions, stages national and regional math camps, publishes a high school problem-solving magazine, provides scholarships, and develops web-based resources. The CMS also stages the high school team, Math Team Canada, that represents Canada at the International Mathematical Olympiad.

Every facet of study, careers, and everyday life relies, to one degree or another, on mathematics. The development of math skills fuels our ability to reason, to organize, and to solve problems – all key skills to understanding and addressing the complexities of life. Because math is so important, the CMS promotes and advances 'the doing of math' across Canada.



fédérale, sans but lucratif et composée de membres La SMC est une œuvre charitable d'inscription fédérale, sans but lucratif et composée de membres et de bénévoles. On compte parmi les membres de la SMC des professeurs, des enseignants, des étudiants, des parents, des universités, des CEGEP, des collèges, des écoles, des sociétés, des particuliers et d'autres sociétés mathématiques du Canada et d'ailleurs dans le monde. Le conseil de direction de la SMC compte des membres représentant diverses régions du Canada, et les comités de la SMC contribuent activement à tous les domaines d'intérêt en mathématique. La SMC compte parmi ses

commanditaires de grandes sociétés et les gouvernements fédéral et provinciaux.



CE QUE NOUS FAISONS

La SMC encourage la recherche et publie les résultats. Elle incite les enseignants en mathématique à partager leur expérience et des pratiques exemplaires. La SMC offre des occasions d'apprentissage en dehors des salles de classe à ceux qui cherchent à enrichir leurs connaissances et à approfondir leurs études. La société fait la promotion de la mathématique comme moyen à préconiser pour faire avancer sa carrière. La SMC est la voix de la collectivité mathématique du Canada. Enfin, elle appuie et souligne l'excellence en mathématique au Canada, tant au niveau national qu'international.

Une grande partie des activités de la société vise les jeunes du Canada. La SMC crée et organise des concours de mathématique, organise des camps de mathématique nationaux et régionaux, publie une revue destinée aux étudiants du secondaire où l'on retrouve des problèmes à régler, décerne des bourses d'études et offre des ressources sur le Web. La SMC est aussi responsable de l'équipe d'étudiants du secondaire représentant le Canada à l'Olympiade internationale de mathématiques.

PRESIDENT'S REPORT President - Jacques Hurtubise (

President - Jacques Hurtubise (McGill)

Something Old, Something New

All in all, it was a good year for the Society, with some very good meetings, and a few new directions. We had two very good meetings this past year, the first in June in Edmonton, and the second in December in Toronto.

Edmonton's was hosted by the University of Alberta, and York and Ryerson kindly co-hosted the Toronto one. In June, the meeting saw some very good plenary lectures, and two prize lectures given by colleagues from UBC- the Krieger-Nelson lecture by Rachel Kuske, and the Jeffery-Williams lecture by Kai Behrend. Yvan Saint-Aubin gave a beautiful and thoughtful lecture, quite in line with his award, which was for Excellence in Teaching. Gerda deVries entertained both us and a wider audience with a lovely (both visually and intellectually) talk on the mathematics of quilting.

The Toronto meeting was one of the most heavily attended meetings ever. We had a wider-ranging Coxeter-James lecture on spectral geometry by Iosif Polterovich, as well as a deep and surprising Doctoral Prize lecture from Youness Lamzouri. At the awards banquet, I had the pleasure of giving the Graham Wright Award for Distinguished Service to David Rodgers, our long serving (and occasionally suffering) treasurer, whose wisdom has guided the Society for many years. The G. de B. Robinson Award went to Hugh Thomas and Alexander Yong and the Adrien Pouliot award to Malgorzata Dubiel, who unfortunately had to cancel her lecture. The meeting had two well attended series of graduate lectures, given by Dina Simapova and Luis Seco, as well as an intensive series on operator algebras. These lectures were a great success, and I hope that they will be the first of many.

Our research journals are doing well; the backlog, on the electronic side, is now under control, and the printed version is slowly catching up, as articles feed through the presses. On the educational side, CRUX

RAPPORT DU PRÉSIDENT

Président - Jacques Hurtubise (McGill)

L'ancien et le nouveau

Tout compte fait, 2011 a été une bonne année pour la SMC. En effet, on a eu quelques excellentes réunions et emprunté quelques voies nouvelles. Nous avons eu deux excellentes réunions au cours de l'année, la première au mois de juin, à Edmonton, la deuxième au mois de décembre, à Toronto. Celle d'Edmonton a été animée par la University of Alberta, et York et Ryerson ont gracieusement co-animé celle de Toronto. La réunion du mois de juin a compté de très bonnes séances plénières, et deux allocutions lors de la remise de prix par des collègues de la UBC l'allocution d'acceptation du prix Krieger-Nelson de Rachel Kuske et celle pour le prix Jeffery-Williams de Kai Behrend. Yvan Saint-Aubin a donné une belle allocution réfléchie, qui cadrait parfaitement avec son prix, soit le Prix d'excellence en enseignement. Gerda deVries nous a diverti, tout comme l'auditoire en général, en donnant un bel exposé (tant sur le plan visuel qu'intellectuel) sur la mathématique du matelassage.

La réunion de Toronto a été l'une des plus courues de tous les temps. Nous avons eu droit à une allocution d'acceptation du prix Coxeter-James de portée plus large sur la géométrie spectrale d'Iosif Polterovich, de même qu'à une allocution profonde et surprenante d'acceptation du prix doctoral de Youness Lamzouri. Au banquet de remise des prix, j'ai eu le plaisir de remettre le prix Graham-Wright pour service méritoire à David Rodgers, notre trésorier de longue date (et parfois souffrant), dont la sagesse a guidé la SMC pendant de nombreuses années. Le prix G. de B. Robinson a été décerné à Hugh Thomas et à Alexander Yong, et le prix Adrien Pouliot a été remis à Malgorzata Dubiel, qui a dû malheureusement annuler son allocution. La réunion comptait aussi deux séries de conférences de deuxième cycle fort courues (par Dina Simapova et Luis Seco), de même qu'une série intensive sur l'algèbre des opérateurs. Ces exposés ont été fort bien accueillis, et j'espère qu'ils ne sont que le début d'une longue série.

now has a new editor, Shaun Godin, in place, and he is heading a re-vamp of the format of the journal. Our math camps are flourishing (more details in the Executive Director's report), and the competitions are heading towards a new mode of functioning, with the COMC now moving to a wider base of institutional support, with the Universities of Toronto and Laval spearheading the efforts last year (and we thank them for their generosity of their efforts), and with coming on line for the coming year. This arrangement, we think, benefits both the Society and the institutions, highlighting the remarkable high school level talent pool that is out there to fuel our future.



Jacques Hurtubise with Rachel Kuske, winner of the 2011 Krieger-Nelson Prize.

On the science policy front, the interaction with NSERC continued to be a preoccupation of the Society, and it was a somewhat stormy year. The outcome of the 2011 competition was far from optimal, and a lot of the reason for this, or at least the portion not due to simple underfunding, seemed to be attributable to some rather irrational rigidities in the adjudication process. The President of NSERC, Suzanne Fortier, attended the Edmonton meeting, and explained things from her point of view. I am glad to report that this year's results seem to be more reasonable; informal reports tell us that a much more flexible and cooperative interaction took place in this year's grant competition. Our thanks are due to all those involved.

For the future, the Mathematics and Statistics Long Range Plan committee continued its work, and will, I Nos revues de recherche spécialisées se portent bien; le retard de traitement sur le plan électronique est maintenant réglé, et la version imprimée se rattrape peu à peu, à mesure que les articles passent sous la presse. Sur le plan éducatif, CRUX compte maintenant un nouveau rédacteur en chef, Shaun Godin. Shaun s'occupe de la refonte du journal. Nos camps mathématiques sont en plein essor (on peut obtenir des détails supplémentaires à ce sujet dans le rapport du directeur exécutif) et les concours se font recentrer peu à peu sur un nouveau mode de fonctionnement : le DOCM obtient graduellement le soutien élargi des établissements, avec les universités de Toronto et de Laval qui s'étaient chargées des efforts l'an dernier (et nous les remercions de ces efforts généreux) et qui se sont engagés pour l'année à venir. Cette entente, selon nous, est profitable tant pour la SMC que pour les établissements. Elle met en évidence le talent remarguable qu'on retrouve au niveau secondaire et qui assurera notre avenir.

Sur le plan des politiques en matière de sciences, l'interaction avec le CRSNG est toujours un sujet de préoccupation pour la SMC. C'était une année pour le moins orageuse. Le résultat du concours de 2011 était loin d'être enviable, situation dont la grande partie, ou du moins la partie qui n'était pas fonction d'un simple sous-financement, semblait attribuable à des règles de sélection relativement rigides et irrationnelles. La présidente du CRSNG, Suzanne Fortier, a participé à la réunion d'Edmonton et a donné son point de vue du dossier. J'ai le plaisir d'affirmer que les résultats cette année semblent plus raisonnables; selon des rapports non officiels, il y aurait eu des échanges bien plus souples et davantage axés sur la coopération pendant le concours de subventions cette année. Nous remercions tous ceux qui ont contribué à cette amélioration.

Pour l'avenir, le comité du Plan à long terme pour les sciences mathématiques et statistiques a poursuivi son travail et présentera, à ce qu'on m'a dit, son ébauche de proposition bientôt. Une grande partie de son travail, et en particulier ses consultations, a eu lieu pendant les réunions de la SMC. On me dit que l'Étude des mathématiques au Canada de la SMC a été une ressource très utile pour le comité am told, be submitting its draft proposal soon. A lot of its work, and in particular its consultations, took place in the context of the Society's meetings, and I am told that the Society's Study of Mathematics in Canada was a very useful resource in its deliberations. We await the results with impatience.

Overall, the Society is doing well. Our finances show a smidgeon of black ink for the third year in a row, following a now well-established pattern of initial pessimism, followed by a feeling of relief as things turn out well in the end. All of this would not be possible without the unceasing vigilance of our Executive Director, Johan Rudnick, who runs a tight but not ungenerous ship. Our staff remains devoted to our mission, and does much to make it all happen. Of course, any professional society depends to a great degree on volunteers, and I would like to thank the many generous people who contribute to the CMS. In particular, I would like to thank our able and ever vigilant treasurer David Rodgers, as well as the other current members of the new executive, Elena Braverman (West), Olivier Collin (Quebec), Karl Dilcher (Atlantic), and Steve Kudla (Ontario), who have now been in place for almost a year. Particular thanks are due to Keith Taylor, who has agreed to take on the job of President as my term comes to an end this June. The Society is in good hands.

dans son processus décisionnel. Nous attendons avec impatience les résultats.

Dans l'ensemble, la SMC se porte bien. Côté finances, nous voyons quelques petits surplus pour une troisième année de suite, après un pessimisme initial maintenant bien établi, suivi d'un soulagement en voyant que tout tournait pour le mieux, au bout du compte. Tout ceci ne serait pas possible sans la vigilance intarissable de notre directeur exécutif, Johan Rudnick, qui veille au grain, sans pour autant manquer de générosité. Notre personnel est toujours dévoué à notre mission et fait beaucoup pour assurer la réussite. Bien entendu, toute société professionnelle est largement tributaire de bénévoles, et je souhaite remercier les nombreuses personnes généreuses qui contribuent à la réussite de la SMC. Je souhaite remercier en particulier notre trésorier des plus compétents et vigilants, David Rodgers, de même que les autres membres actuels du nouvel exécutif, soit Elena Braverman (Ouest), Olivier Collin (Québec), Karl Dilcher (Atlantique) et Steve Kudla (Ontario), qui y siègent maintenant depuis près d'un an déjà. Je souhaite remercier tout particulièrement Keith Taylor, qui a accepté le poste de président, car mon mandat sera écoulé à la fin du mois de juin. La SMC est entre bonnes mains.

EXECUTIVE DIRECTOR'S REPORT

Executive Director - Johan Rudnick

RAPPORT DU DIRECTEUR EXÉCUTIF Directeur Exécutif - Johan Rudnick



Helping Make Better Math Happen

What CMS does and accomplishes is a direct result of the hundreds of volunteers and staff that actually make the plans, awards, journals, camps, and programs and services to support Canadian mathematics and help make

better math happen in Canada. There is very little that CMS volunteers get involved with that is not operationally supported by the CMS. In 2011, the

Pour des mathématiques meilleures au Canada

Les travaux et les réalisations de la SMC sont le fruit direct des efforts de milliers de bénévoles et de membres du personnel qui dressent les plans et préparent les prix, les revues spécialisées, les camps et les programmes et les services afin d'appuyer les mathématiques canadiennes et pour de meilleures mathématiques au Canada. Très peu d'activités auxquelles participent les bénévoles de la SMC ne sont pas appuyées par la SMC sur le plan fonctionnel. En 2011, le bureau de la SMC a poursuivi son soutien des comités et des bénévoles de la SMC et a réussi, CMS office continued to support CMS committees and volunteers and it also managed to maintain, and in

some cases improve, existing advancement, discovery, learning, and application programs, as well as take on some new responsibilities.

In 2010 the CMS initiated a strategic change to how it makes math happen – the CMS decided to start focusing on promoting the advancement, discovery, learning, and application of mathematics. The change "The support and advice of the CMS office was invaluable in helping us to start thinking about how to develop Math Reports in the future."

George Elliot Editor in Chief/ Rédacteur en chef Math Reports/ Rapports mathématiques

"L'appui et les conseils du bureau de la SMC ont été fort précieux et nous ont aidé dans nos réflexions sur la préparation de rapports mathématiques à l'avenir."

in orientation is starting to affect CMS operations and management as committees are being asked to consider what they are doing to move CMS forward and the CMS office starts to refocus and realign resources.

Under the rubric of emerging change, 2011 was very busy year for CMS operations. The year marked a second year in a row that the CMS managed to etch out a tiny but real operating surplus, notwithstanding a planned budget deficit. The year was also marked by new university and organizational partnerships as well as program initiatives. At the same time, CMS became engaged with the NSERC Long Range Plan for Mathematical and Statistical Sciences, Mathematics of Planet Earth 2013, and the Mathematical Congress of the Americas 2013.

For CMS, helping to promote the advancement of mathematics encompasses the development of the CMS membership community as well as support to the CMS Board of Directors, the Executive Committee, and various other CMS committees and sub-committees, including providing secretariat support and staging and planning business and AGM meetings. It also involves being engaged in community development, such as long range planning and endowment grants, and advocacy in areas such as Discovery Grants. In addition, it also includes production of the CMS newsletter, CMS Notes, as the editors introduced new content materials under the guidance of the

en plus, à maintenir et, dans certains cas, à améliorer les programmes d'avancement, de découverte,

> d'apprentissage et d'application existants. Elle a aussi assumé de nouvelles responsabilités.

En 2010, la SMC a apporté un changement stratégique à la façon dont elle favorise de meilleures mathématiques au Canada. En effet, la Société a décidé d'accorder la priorité à la promotion de l'avancement, de la

découverte, de l'apprentissage et de l'application des mathématiques. Les effets de ce changement d'orientation commencent à se faire sentir au niveau des opérations et de la gestion de la SMC, car on demande maintenant aux membres des comités de réfléchir à ce qu'ils font pour faire avancer la SMC. Le bureau de la SMC a commencé à recentrer et à réaligner ses ressources en conséquence.

Sous la rubrique des changements nouveaux, 2011 était une année fort chargée pour la SMC. C'était la deuxième année d'affilée où la SMC réussissait à réaliser un petit, mais véritable surplus de fonctionnement, sans compter un déficit budgétaire planifié. Elle a aussi formé de nouveaux partenariats avec des universités et des organisations et créé de nouvelles initiatives de programme. Pendant l'année, la SMC s'est engagée à l'égard du Plan à long terme pour les sciences mathématiques et statistiques de la CRSNG, les Mathématiques de la planète Terre 2013 et le Congrès des mathématiques dans les Amériques 2013.

Pour la SMC, contribuer à la promotion des mathématiques passe par l'augmentation du nombre d'adhésions et un appui au Conseil d'administration, au Comité exécutif et à divers autres comités et souscomités, y compris un service de secrétariat, de même que par la planification et l'organisation des réunions d'affaires et des AGA. Il s'agit aussi de participer activement au développement de la communauté, CMS Publications Committee, as well as delivering a diverse award program. Advancement and indeed any other activity would not be possible without maintaining an enviable record of on-line performance and robust office support. While CMS operations

'hummed along' in 2011, a number of changes were introduced:

- New information protection, language, and conflict of interest policies;
- New look for CMS Notes; and
- New public posting of CMS financial statements.

For CMS, helping to promote the discovery of mathematics encompasses semi-annual research meetings, publishing research journals, honouring outstanding research and researchers, and supporting student-oriented seminars and workshops. Operationally this means that the actual research meetings are staged and executed while at the same time planning for meetings over the next few years, including joint international meetings. This also means the actual production of the two CMS research journals, CJM and CMB, while at the same time starting to examine how best to sustain the journals in the future, especially with respect to marketing. In 2011, the CMS also started to look at how the journal publication infrastructure developed by the CMS publication Committee and the CMS Winnipeg office could be used to support other Canadian mathematics research journals. Some of the changes introduced in 2011 include:

- New opportunity for more universities to be involved as research meeting directors;
- New student workshops added to research meetings; and

notamment à la planification à long terme et aux bourses du fonds de dotation, de même que de consentir des efforts de promotion dans des domaines tels que les subventions à la découverte. En outre, il s'agit de voir à la rédaction du bulletin de nouvelles

"CMS financial and registration support will make a big difference to our ability to stage and develop the Kangaroo math competitions."

Valeria Pandelieva Kangaroo Math Organizing Committee/ Comité organisateur

"L'aide financière et le soutien en matirè d'inscriptions de la SMC nous aideront énormément à organiser et à créer des concours mathématiques Kangaroo." de la SMC et des Notes de la SMC, puisque les rédacteurs ont ajouté du contenu sous les conseils du Comité des publications de la SMC et de voir au programme de prix divers. Il n'y aurait aucun avancement ni activité si l'on n'assurait pas un rendement enviable en ligne et un excellent soutien

administratif au bureau. Bien que les activités de la SMC aient été « comme sur des roulettes » en 2011, on a adopté un certain nombre de changements :

- nouvelle politique sur la protection des renseignements personnels, nouvelle politique linguistique et nouvelle politique concernant les conflits d'intérêt;
- > nouvelle présentation des Notes de la SMC; et
- nouvelle diffusion publique des états financiers de la SMC.

Selon la SMC, aider à promouvoir la découverte des mathématiques se fait grâce aux réunions de recherche semi-annuelles, en publiant des revues de recherche spécialisées, en soulignant la recherche et les chercheurs exceptionnels et en appuyant des séminaires et des ateliers axés sur les étudiants. Sur le plan fonctionnel, il faut organiser les réunions de recherche et les administrer quand elles ont lieu, tout en planifiant les réunions qui auront lieu au cours des prochaines années, y compris les réunions internationales conjointes. Il faut aussi assurer la préparation des deux revues de recherche spécialisées de la SMC, soit le JCM et le BCM, tout en commençant à examiner les meilleurs moyens d'assurer la survie des revues spécialisées, à l'égard surtout du New pages added to CMB to publish more research articles.

For CMS, helping to promote the learning of mathematics encompasses staging the education



Math Team Canada, 2011 IMO

component of the semi-annual national meetings, production of CRUX with Mayhem, honouring teaching excellence, partnering with universities to hold math camps, staging national mathematics competitions, and assembling and coaching Math Team Canada to compete in the International Mathematical Olympiad (IMO). The CMS also supports universities and other organizations in staging math competitions. In 2011, the CMS also started to look at how the competitions

infrastructure developed by the CMS Competitions Committee and the CMS office could be used to support other Canadian math competitions. Some of the changes in 2011 include:

- New national university partnership and format created for the COMC;
- New math camps added, including a special camp for girls; and

"The CMS's extensive experience in handling conferences and their online facilities were a tremendous asset in the planning of CanaDAM 2011."

Prof. Ortrud Oellermann University of Winnipeg Chair, CanaDAM 2011 Executive Committee/ Présidente, Comité exécutif de CanaDAM 2011

"La grande expérience de la SMC en matière de gestion de conférences et ses fonctions en ligne ont été un outil précieux pour planifier CanaDAM 2011."

marketing. En 2011, la SMC a également commencé à examiner ses options pour employer l'infrastructure de publication de revues mise au point par le Comité des publications de la SMC et du bureau de la SMC à Winnipeg afin d'appuyer d'autres revues de recherche spécialisées en mathématiques au Canada. Voici quelques-uns des changements apportés en 2011 :

- nouvelle occasion pour un plus grand nombre d'universités de participer comme directeurs au cours des réunions de recherche;
- nouveaux ateliers pour étudiants ajoutés aux réunions de recherche; et
- nouvelles pages ajoutées au JCM, afin de publier un plus grand nombre d'articles de recherche.

Selon la SMC, aider à promouvoir l'apprentissage des mathématiques se fait en organisant le volet éducatif des réunions nationales semi-annuelles, en préparant CRUX avec Mayhem, en soulignant l'excellence en enseignement, en formant des partenariats avec les universités afin d'organiser des camps mathématiques, en organisant des concours de mathématiques nationaux et en formant et en encadrant l'Équipe mathématique Canada pour qu'elle puisse participer à l'Olympiade internationale de mathématiques (OIM). La SMC appuie également les universités et d'autres organisations qui organisent des concours

> de mathématiques. En 2011, la SMC a également commencé à examiner certaines options pour employer l'infrastructure des concours mise au point par le Comité des concours de la SMC et le bureau de la SMC afin d'appuyer d'autres concours de mathématiques au Canada.

Voici quelques-uns des

changements apportés en 2011 :

New training home, BIRS, for Math Team Canada.

An unfortunate and major challenge for the CMS in 2011 was the need to address new competing competitions introduced by the University of Waterloo. In addition, the CMS continued to struggle with an initiative to revamp CRUX and address a publication backlog. In 2011 the CMS also decided to address a unique opportunity – hosting, in one form or another, the continuation of the Statistics Canada Education Outreach program material that is scheduled to be eliminated in 2012.



Edmonton, 2011 Summer Meeting

For CMS understanding how best to help promote the application of mathematics (outside advancement, discovery and learning contexts) has been a real challenge – especially in light of the research orientation of most CMS members. Furthermore, some applied mathematics organizations are quite surprised that the CMS has a genuine interest in helping them. While the role of the CMS in promoting the application of mathematics is still very much a 'work in progress,' in the interim, the CMS has been reaching out to see what it should and can do. One way the CMS helped in 2011 was the continued 'back office' operational support, under contract, provided to the Statistical Society of Canada. Another way the CMS helped in 2011 was assisting CanaDAM stage their conference.

- nouvelle formule de partenariat national avec les universités pour le DOCM;
- nouveaux camps mathématiques ajoutés, y compris un camp spécial pour filles; et
- nouvel endroit de formation, le BIRS, pour l'Équipe mathématique Canada.

Défi de taille et malencontreux, la SMC a dû en 2011 tenir compte de nouveaux concours concurrentiels créés par la University of Waterloo. De plus, la SMC était toujours aux prises avec une initiative qui visait à revitaliser CRUX et à régler les retards de publication. En 2011, la SMC a également décidé de profiter d'une occasion unique – assurer, d'une forme ou d'une autre, la continuité du matériel du Programme de soutien à l'éducation de Statistique Canada qui devait être éliminé en 2012.

Pour la SMC, comprendre comment s'y prendre pour promouvoir le mieux possible l'application des mathématiques (outre les contextes d'avancement, de découverte et d'apprentissage) s'est avéré un véritable défi – surtout à la lumière de l'orientation de la recherche de la plupart des membres de la SMC. De plus, certaines organisations de mathématiques appliquées sont fort surprises d'apprendre que la SMC est véritablement résolue à les aider. Bien que le rôle de la SMC par rapport à la promotion des moyens qui permettent d'assurer l'application des mathématiques soit toujours, en quelque sorte, un « projet en chantier » pour l'instant, la Société a participé à des consultations afin d'établir ce qu'elle devrait et ce qu'elle pouvait faire. Une des façons dont la SMC a aidé en 2011 a été d'assurer le soutien fonctionnel d'arrière-plan, à contrat, pour la Société statistique du Canada. La SMC a contribué d'une autre façon en 2011, en aidant CanaDAM à organiser sa conférence.

Au cours de l'année, la SMC a également apporté des changements pour 2012. Elle a notamment modifié ses catégories de membres, ce qui a permis de créer de nouveaux frais moins élevés, a adopté une structure tarifaire nationale-internationale à deux niveaux pour les taux d'adhésion afin de compenser les effets négatifs d'un dollar canadien vigoureux, a In 2011 the CMS also moved forward and made changes for 2012, including revamping CMS membership categories that will see new lower fees, moving subscription rates to a two-tier domesticinternational pricing structure to off-set the negative impact of a high Canadian dollar, once again adding more pages to CMB, and expanding CMS partnerships with universities.

Operationally, 2011 represented a continuation of the cycle of quiet renewal and development that was launched in 2010 and that cycle is indeed starting to affect how CMS helps make math happen in Canada. Membership is starting to be more diverse. Research meetings are starting to be more engaging. Learning and education activities are starting to expand. And more math organizations are starting to discover that the CMS really can help them. What is slowly emerging, and as was suggested in 2010, is a CMS that will be more relevant and effective, a CMS that will be more sustainable, and a CMS better positioned to help advance the interests of everyone in Canada and more especially the broader mathematics community in making better math happen in Canada.

ajouté des pages au JCM et a formé davantage de partenariats avec les universités.

Du point de vue fonctionnel, l'année 2011 était la continuité du cycle de renouvellement et de développement discrets lancé en 2010, et ce cycle commence en effet à influencer le soutien que la SMC donne aux mathématiques au Canada. On commence à voir une plus grande diversité des membres. Les réunions de recherche commencent à susciter un plus grand intérêt. Les activités d'apprentissage et d'éducation commencent à prendre de l'ampleur. Et davantage d'organisations en mathématiques commencent à découvrir que la SMC peut véritablement les aider. Ce qui ressort peu à peu et ce qui avait été suggéré en 2010, est une SMC qui sera plus pertinente et efficace, une SMC qui sera plus durable et une SMC qui sera mieux placée pour contribuer à l'avancement des intérêts de tous les Canadiens et Canadiennes et plus particulièrement ceux de la communauté des mathématiques en général, pour des mathématiques meilleures au Canada.

TREASURER'S REPORT

Treasurer - David Rodgers



CMS operating results for 2011 show *a net revenue surplus of \$12,182, (\$8,328 plus \$3,854 in foreign exchange)*, the second year in a row where the CMS has posted a revenue surplus, net of foreign exchange. The TD Asset Management Fund balance was \$1,678,537 on December 31, continuing a recovery cycle

going back to 2008.

Operating results for 2011 were achieved in the face of a completely re-engineered COMC competition and fewer than expected number of participants at the Summer meeting. On the other hand, there were more than the expected number of participants at the Winter meeting. There was some attrition in individual

RAPPORT DU TRÉSORIER

Trésorier - David Rodgers

La SMC a enregistré en 2011 *un surplus de revenus net de 12 182 \$ (8 328 \$ plus 3 854 \$ en devises étrangères),* ce qui représente une deuxième année de surplus (net de devises étrangères) de suite pour la SMC. Le solde du fonds géré par Gestion de placements TD était de 1 678 537 \$ en date du 31 décembre, chiffre qui s'inscrit bien dans une optique de continuité d'un cycle de rétablissement qui remonte à 2008.

Les résultats en 2011 ont été obtenus malgré un concours du DOCM complètement repensé et un nombre moins important que prévu de participants à la réunion d'été. D'autre part, on comptait un nombre plus élevé que prévu de participants à la réunion d'hiver. On a constaté une diminution du nombre d'adhésions individuelles, mais une augmentation du nombre de commandites d'entreprises. Les revenus memberships but more corporate sponsorships. Net publishing revenue was roughly flat but the number of subscriptions down. CRUX is a continuing issue going forward. Overall, the CMS financial condition is stable but fragile.

In 2011, the CMS changed auditors. The revised audit format is organized to align with promoting advancement, discovery, learning and application of mathematics. The outcome is a single, bilingual audit report that moves the CMS further in the direction of mission-based reporting. Work for the 2011 Audit is now complete and the auditors are satisfied that the CMS continues to properly account for its revenues and expenses.

The weak US dollar continues to exert pressure on operating results going forward, with no realistic prospects for relief over the foreseeable future.

The CMS is not alone in facing financial and professional challenges. Virtually every professional association and scholarly society is in a similar position. Their members are demanding focused, electronically connected opportunities that expand their professional network, engage research collaborators, and facilitate their learning.

The Executive Director, Finance Committee, and Executive Committee remains acutely aware of these trends and that the CMS must redouble efforts to diversify and expand its revenue base in ways that offer programs and services of interest to the Canadian mathematical community. nets découlant des publications étaient à peu près les mêmes qu'au cours de l'exercice précédent, mais le nombre d'abonnements a baissé. CRUX est une question qui reste à régler. Dans l'ensemble, la situation financière de la SMC est stable, mais fragile. En 2011, la SMC a changé de vérificateur. La nouvelle formule de vérification s'aligne sur la promotion de l'avancement, de la découverte, de l'apprentissage et de l'application des mathématiques. Il en découle donc un seul et unique rapport de vérification bilingue qui permet à la SMC de se diriger progressivement vers le principe du rapport axé sur la mission. Le travail nécessaire à la vérification de 2011 est maintenant terminé, et les vérificateurs sont d'avis que la SMC rend toujours de manière convenable des comptes sur ses revenus et ses dépenses.

Le faible dollar américain exerce toujours des pressions sur les résultats fonctionnels; on n'entrevoit aucune diminution réaliste de cette pression dans un avenir rapproché.

La SMC n'est pas la seule à éprouver des difficultés financières et professionnelles. Pratiquement toutes les associations professionnelles et sociétés savantes se trouvent en position semblable. Leurs membres exigent des occasions ciblées et électroniques qui élargissent leur réseau professionnel, font participer des collaborateurs en recherche et facilitent l'apprentissage.

Le directeur exécutif, le Comité des finances et le Comité exécutif sont toujours très conscients de ces tendances et savent fort bien que la SMC doit redoubler d'efforts pour se diversifier et accroître ses revenus, de manière à offrir des programmes et des services d'intérêt pour la communauté mathématique du Canada.

ADVANCEMENT OF MATHEMATICS COMMITTEE REPORT

Chair - Jacques Hurtubise (McGill)

The Advancement of Mathematics Committee oversees the activities of the CMS for advancement and development of mathematics, including monitoring activities both within and without the Society and determining opportunities for the co-ordination of, outreach, publicity, fund raising and other promotional activities. The Committee advises the Board of Directors and the informal Development Group (consisting of the Executive Committee and the chairs of each standing committee) on matters concerning the Society's activities in these areas.

In 2011, the Board, the Executive, other committees, staff, and the community organized NSERC Mathematics and Statistics Liaison Group, continued to be actively engaged in the affairs of the CMS and as such, the demands on the AMC were such that meetings of the committee were not required. Two particularly noteworthy activities that contributed to the advancement of mathematics were the issuance of The State of Canadian Mathematics, A 2010 Survey and Perspective (August 2011) and ongoing consultation with the Long Range Plan for Mathematical and Statistical Sciences working group that is expected to release their report to NSERC in 2012.

BILINGUALISM COMMITTEE REPORT

Chair - Joseph Khoury (Ottawa)

The role of the CMS Bilingualism Committee is to ensure the bilingual character of the CMS's education, publication, and research programs as well as the electronic and other activities of the Society.

For the third consecutive year, most of the committee efforts were focused on ensuring that some important public documents of the Society were provided in both languages especially documents containing highly technical material that could not possibly be done by a language translator (non mathematician). As usual, this requires a considerable effort and broad knowledge of areas of research in mathematics.

The following is a list of the Committee's activities for 2011:

- Translation of the G. de B. Robinson Press Release;
- Providing the French for the Canadian Math Open (CMO) Questions;
- Providing the French for the Canadian Math Open (CMO) Report;
- Providing Technical assistance with the IMO Press Release;
- Providing the French for the IMO results for the CMS webpage;
- Provide the French for the Asian Pacific Math Olympiad Questions; and
- Numerous suggestions and discussions on some aspects of the CMS webpage.

EDUCATION COMMITTEE REPORT Chair: Peter Taylor (Queen's)

The role of the Education Committee in any professional academic society like the CMS is to help implementing education strategies, consistent with the society's mission and Strategic Plan. The Committee is also involved in developing new ideas and strategies to either expand the existing programs or to create new ones in the goal of impacting more students and educators. This is accomplished by reviewing reports and issues that may have

an impact on educationrelated topics pertaining to the CMS, by selecting winners for national education prizes and by recommending support for various educational activities.

As part of these general objectives, the committee has a number of specific tasks. These include the selection of organizers for the education sessions at the semi-annual meetings, the annual selection of the winners of the Adrien Pouliot Award and the CMS Excellence in Teaching Award, and the allocation of grants to provincial math contests. Starting in 2011, the committee has taken on a new duty, the selection of the winners of the Math in Moscow Scholarship.

In 2011 the Committee met at each of the CMS meetings and its main activities can be summarized as follows:



Sean Chamberland (Nelson Education), Yvan Saint-Aubin (Montreal) and Peter Taylor (Queens) at the 2011 CMS Summer meeting in Edmonton



Malgorzata Dubiel, winner of the 2011 Adrien Pouliot Award

- The winner of the 2011 Teaching Award was Dr. Yvan Saint-Aubin of the University of Montreal.
- The winner of the 2011 Adrien Pouliot Award was Dr. Malgorzata Dubiel from Simon Fraser University.
- The education session at the Summer 2011 meeting at University of Alberta was organized by Tiina Hohn of Grant MacEwan University with the themes of math fairs and math outreach. The Education plenary speaker was Gerda DeVries of the University of Alberta and she talked on Mathematics in Quilting with a number of marvellous examples.
- The education session at the Winter 2011 meeting in Toronto was organized by Walter Whiteley of York University with the theme Big Ideas in Mathematics. The education plenary speaker was Chris Wild of the University of Aukland who spoke on The world through a bathroom window: Statistics as you've never seen it before.
- Provincial Grants: The committee has expanded somewhat the scope of these awards and has advertised them more broadly. The committee made 11 awards of a total amount of \$5,000.00.
- Math in Moscow: The 2011 recipients were Edith Viau for the winter semester and Dallas Clement for the fall semester.
- The subcommittee on educational materials on the CMS website has a number of important (and ambitious

ELECTRONIC SERVICES COMMITTEE REPORT

Chair - Jacques Carette (McMaster)

The Electronic Services Committee (ESC) provides policy oversight for services provided by the Electronic Services Group (ESG - Ottawa) and the electronic aspects of the work of the Publications Office (Pub - Winnipeg).

The complete list of projects worked on would be excessively long and largely meaningless for most readers of this report, and thus only highlights are given. This is my last report as Chair, a role I have held since September 2007. Quite a lot has changed in these last few years, including quite a few office moves. Some things have stayed constant: Alan in Ottawa and Craig and Michael in Winnipeg are still there, giving the CMS solid corporate memory.

When I joined, there were quite a number of problems with electronic services, which thankfully have largely been resolved in the intervening years (and which previous reports have highlighted, so I will not repeat this here). Of course, there were fewer problems than there could have been –the CMS had been well served on that front by the stewardship of David Rodgers. Hopefully I have been able to do the same for my successor.

For 2011, ongoing operations (managing the CMS servers, providing support for the CMS office staff, etc) continue to require roughly half the time of the ESG. Work also continues on a lot of the back office systems, with the aim of making the CMS office more productive. It seems that the automated system for abstract submission is working well.

Looking forward, it will be the turn of the accounting system to get an upgrade in 2012, followed by some work for COMC (participant registration, payments, etc). A potentially huge piece of work is whether the CMS will take over the StatsCan web site, which I am sure other committee chairs will have more to report about.

As in past years, the ESG continues to be the main source of services that the CMS offers to the wider Canadian mathematical community. In particular, the Statistical Society of Canada contracts the CMS for services, which brings in some revenue, as well as some re-usable infrastructure, such as election software and a modern membership system. While there has frequently been a desire from the society to be quite forward looking—even innovative—with respect to its electronic services, reality has been that ESG has largely been playing a catch-up game. The large backlog of infrastructure projects, coupled with the heavy load of internal support, has meant that very little time was left for strategic thinking.

I hope that in the next couple of years, we will see the end of the most pressing infrastructure projects, and some time from the ESG will be allocated to strategically important projects. One change has already been done: the ESC now has a student member. This will hopefully spur some more creative thinking on what services the next generation will expect from a modern mathematical society.

ENDOWMENT GRANTS COMMITTEE REPORT

Chair - Hassan Safouhi (Alberta)

The CMS Endowment Grants Committee adjudicates proposals for projects that request financial support from the CMS Endowment Grants Competition. Projects that are funded must contribute to the goals of the CMS and to the broader good of the Canadian mathematical community.

In 2011, the committee awarded grants to three projects:

- MathLink An Enrichment Program for High School Students: A program to provide high school students the opportunity to see mathematics beyond the high school curriculum, and brings together students who enjoy doing mathematics. Each week, 15-20 students are expected to participate. [Organizer; Yuly Billig, Carleton University]
- Two Weeks At Waterloo A Summer School for Women in Mathematics: The aim of the program is to target top female undergraduate students from across Canada and bring them together to study topics in Mathematics for an intense twoweek immersion. The hope is to encourage these gifted young women to continue on to graduate work in mathematics. The program will provide both the enrichmentof the undergraduate curriculum and a research component, in a collaborative environment. [Organizer: Kathryn Hare, University of Waterloo]





Classroom Adventures in Mathematics: A program designed to bring university research to the teachers in the community in an interactive way. Participants are provided with a series of lectures on current topics in mathematics and then some activities and lessons that they can take away with them to use in their own classrooms. Single day themed seminars are offered throughout the year as well as a three-day multi-themed seminar series in the summer. [Organizer: James Colliander, University of Toronto]

FINANCE COMMITTEE REPORT

Chair - Yvan Saint-Aubin (Montréal)

\$12,182: This is the 2011 CMS operating budget surplus, the second in a row. The 2011 budget, outlined during the months of August to October 2010, had foreseen a deficit of \$38K. On a budget of \$1.44M, the forecasted deficit and the realized surplus are small. But, with severe deficits for many years in a row, the surpluses of 2010 and 2011 are most welcome.

The year 2011 saw the implementation of the two-tier – domestic and international – pricing of the CMS journals. This new way of pricing was introduced to counter the erosion of revenues due to the rise of the Canadian dollar with respect to the US dollar. (As of April 2012, 722 of 750 subscriptions of 2011 have been renewed for 2012.)

The budgeting exercises are meant to be as realistic as possible. When there is doubt, they lean on the conversative. An example shows how difficult the exercise is. The two CMS meetings of 2011 (Edmonton and Toronto) welcomed together more participants than expected (about 40, that is, a departure of about 10% of the targeted number) and the costs were lower. These meetings were to be responsible for a deficit of about \$34K and they actually led to a net surplus of \$8K.

The year has seen sustained efforts toward increasing donations and sponsorships and rationalizing the already remarkably efficient Ottawa office. But a diversification of revenues is needed. This is the only way out of the tight margin within which the CMS has been operating. The Finance Committee is pursuing a reflexion to propose to the Executive Committee possible avenues. The budget for 2012 foresees a deficit of about \$85K. These revenues are thus definitely needed and all CMS members are invited to propose ideas.

INTERNATIONAL AFFAIRS COMMITTEE REPORT

Chair - Niky Kamran (McGill)

The International Affairs Committee oversees the activities associated with international mathematics organizations and considers other matters of an international nature which are of interest to the Canadian mathematics and mathematics education communities. The committee also acts as the Canadian National Committee to the International Mathematical Union (IMU).

The appointment of Christiane Rousseau (Montreal) as Vice-President of the IMU, a Canadian first, has been very well received; this important and high profile appointment has aided her launch of the international Mathematics of Planet Earth 2013 initiative that is garnering support and participation from many parts of the world.

In 2011 the performance report prepared by the Committee and submitted to the National Research Council (NRC) was approved and the NRC funded the renewal of the CMS membership in the IMU as the Canadian National Committee. In addition, the CMS also maintained relations with 21 reciprocal and affiliated foreign mathematical societies. Furthermore, the CMS supported the International Council for Industrial and Applied Mathematics (ICIAM) congress held in Vancouver.

INVESTED FUNDS COMMITTEE REPORT

Chair - David Bates

The Invested Funds Committee met twice during 2011, once in April and again in October. During the April meeting, the ongoing recovery from the 2008 global credit crisis and its effect on the invested funds was reviewed. Overall, the funds grew 9.08% over the year ending March 2011 compared with a 9.03% rise in the corresponding indexes. The funds' performance, together with two recently introduced investment strategies from TD Asset Management were reviewed and discussed. Once again the Committee expressed its comfort with our current passive and diversified investment strategy. We discussed the advantages for the CMS to be able to anticipate specific annual dollar value allocations from the Endowed Funds and how this goal might be achieved through regular (but smaller) annual allocations.

At the October meeting, a review of the Investment Fund Report as of September 30, 2011 revealed a yearly overall investment return of 1.82% and a decline of 4.04% over the most recent 3 months. It was noted that the equity markets are currently experiencing high volatility with a downward trend while the (Government) bond market has remained strong. TD Asset Management noted that our portfolio already was well structured and that as long as our allocation demands were somewhat flexible, we were well positioned in the current environment.

The Committee continued discussing the desire to anticipate specific dollar value allocations, and decided to recommend a funding level for each endowment fund to reflect an allocation of 3% of the corresponding projected year end fund value less administration costs. The following projected allocations for the Endowed Funds for 2012, net of administration fees, were approved: \$7,500 for the CMS Endowment Fund, \$3,832 for the Olympiads Fund, and \$0 for the David Borwein Fund noting that a payout from the Borwein Fund was not scheduled for 2012.

The Committee felt that the reporting framework for the Endowed Funds could be improved and moved that the CMS implement an updated approach for its next meeting in April 2012.

MATHEMATICAL COMPETITIONS COMMITTEE REPORT

Chair - Bill Sands (Calgary)

The Mathematical Competitions Committee (MCC) oversees the Society's involvement in mathematics contests. The Society sponsors and runs three competitions: the Sun Life Financial Canadian Open Mathematics Challenge (COMC), the Sunlife Financial Repêchage, and the Sun Life Financial Canadian Mathematical Olympiad (CMO). The MCC is also responsible for Canada's participation in the Asian Pacific Mathematics Olympiad (APMO) and the International Mathematical Olympiad (IMO), and supervises the CMS National Math Camp.

Most of the work of the MCC is done by its three subcommittees (the COMC, CMO, and IMO Committees). Further information, including media releases, on most of the items in this report can be found through the CMS Competitions web pages: www.cms.math.ca/Competitions and www.cms.math.ca/MediaReleases.

The Sun Life Financial Canadian Open Mathematics Challenge

The sixteenth writing of the COMC, the fifth under the banner of Sun Life Financial, took place on November 2, 2011. This was also the first time that the Centre for Education in Mathematics and Computing at the University of Waterloo has not been involved in the running of the COMC.



Instead, in 2011 the CMS partnered with University of Toronto and Laval University to stage the COMC, as well as with the University of Ottawa, Carleton University, and Nelson Education. The CMS extends a special note of thanks and appreciation to Jim Colliander (Toronto), Pamela Brittan (Toronto), Frederic Gourdeau (Laval), Line Baribeau (Laval), Joseph Khoury(Ottawa), David Thomson (Carleton), and Sean Chamberland (Nelson) and all the volunteers that helped to mark the competition papers.

The competition questions were developed by the 2011 Problem Committee which consisted of Adrian Tang (Calgary and Google) who chaired and coordinated the committee, David Arthur (Google), Farzin Barekat (UCLA), Lino Demasi (SFU), Alex Fink (NCS), Richard Hoshino (NII Tokyo), Andy Liu (Alberta), and Alexander Remorov (Toronto). The success of the COMC owes much to the quality of the questions developed for the competition and the 2011 committee is to be thanked and commended on their diligence and hard work to make the competition more accessible with a new three-section format. As the title sponsor of the competition and longstanding sponsor of the CMS, the support of Sun Life Financial is very much appreciated and valued.

The COMC has several purposes. First and foremost, it aims to encourage students in their exploration of mathematics and problem solving. Second, the COMC provides an enrichment activity for teachers to use with their students during the Fall term. Third, the COMC is used by the CMS to identify students who will write the Canadian Mathematical Olympiad and who will attend, among other events, the Winter Training Seminar and the National Math Camp.

With the major organizational changes, including a change to an earlier date, the 2011 edition of the COMC experienced a drop in participation to 4220 students, of which 629 were international competitors. The paper had an average mark of 37 out of 80. Three students, including two in Canada, achieved a perfect score of 80.



The top four competitors in Canada in the 2011 COMC were:

- GOLD MEDAL AWARD: Matthew Brennan, Upper Canada College, Toronto, ON and Steven Yu, Pinetree Secondary School, Coquitlam, BC;
- SILVER MEDAL AWARD: James Rickards, Colonel By Secondary School, Gloucester, ON; and
- BRONZE MEDAL AWARD: Kevin Zhou, Woburn Collegiate Institute, Scarborough, ON.

Thirteen other students were named to the Honour Roll. In addition, hundreds of awards at the provincial level and at various regional and grade levels were made, and one \$1000 prize and over 400 T-shirts were given out through random draws. Further details are available at www.cms.math.ca/ Competitions/COMC/.

COMC Gold Medal Award Winner, Matthew Brennan

The Canadian Mathematical Olympiad

The 43rd Canadian Mathematical Olympiad was written by 81 candidates on Wednesday, March 23, 2011. Nine students were awarded prizes:

- FIRST PRIZE and the Sun Life Financial Cup: Mariya Sardarli, Strathcona High School, Edmonton, AB;
- SECOND PRIZE: Calvin Deng, William G. Enloe High School, Raleigh, NC, USA (Canadian citizen);
- THIRD PRIZE: Alex Song, Detroit Country Day Middle School, Beverly Hills, MI, USA (Canadian citizen); and
- HONOURABLE MENTIONS: Matthew Brennan, Upper Canada College, Toronto, ON; Yuzhou Chen, Sir John A. Macdonald Collegiate Institute, Agincourt, ON; Yi Liu, York Mills Collegiate Institute, Toronto, ON; James Rickards, Colonel By Secondary School, Gloucester, ON; Hunter Spink, Western Canada High School, Calgary, AB; and Susan Sun, West Vancouver Secondary School, West Vancouver, BC.



This was the first year in some time that the awards ceremony for the CMO was not held at the University of Waterloo. The question of how to stage an annual awards ceremony for the CMO is still being pondered. A full report of the CMO, including the question paper, solutions and analysis of the marking can be found at www. cms.math.ca/Competitions/CMO.

This year, 51 students with the highest COMC scores were invited to write the CMO. Another 150 students, next in rank, were invited to participate in the CMO qualifying Sunlife Financial Repêchage: a set of 10



Jacques Hurtubise (McGill), Mariya Sardarli and Robin Rankine (Sunlife)

problems posted online in January. Repêchage participants had just one week to submit solutions. The Repêchage was assembled and graded by volunteers at the University of Waterloo under the supervision of Ian VanderBurgh. The top 28 students from the competition were then invited to the CMO. A couple of additional students were invited to write the CMO based on other high school competition results and participation in the winter camp.

The Society is indebted to many sponsors for the success of the CMO, particularly to its dedicated and long-term major sponsor, Sun Life Financial.

The 52nd International Mathematical Olympiad (IMO) took place in Amsterdam, the Netherlands, from July 16 to July 24, 2011. The Math Team Canada Leader was Dorette Pronk of Dalhousie University, the Deputy Leader was David Arthur of Google Inc., and the Leader Observer was Jacob Tsimerman of Harvard University. The six high school students on the Canadian team were Matthew Brennan, Upper Canada College, Toronto, ON; Heinrich Jiang, Honourable Vincent Massey Secondary School, Windsor, ON; James Rickards, Colonel By Secondary School, Ottawa, ON; Mariya Sardarli, Strathcona High School, Edmonton, AB; Alex Song, Detroit Country Day School, Beverly Hills, MI, USA (a Waterloo, ON resident); and Hunter Spink, Western Canada High School, Calgary, AB.



IMO Team Canada

The Canadian team placed 17th out of 105 countries. A

Gold Medal was awarded to Alex Song, Silver Medals to James Rickards and Hunter Spink, and Bronze Medals to Matthew Brennan, Heinrich Jiang and Mariya Sardarli. At 14-years-old, Alex Song is the youngest Gold Medalist in the history of Canada's participation at the IMO.

The team's total score was 132 out of 252. The CMS's media release on the 2011 IMO results can be found at www.cms.math.ca/MediaReleases/2011/imo-results.

The Winter Training Seminar was hosted by York University, Jan 4–9, 2011, and was attended by 12 high school students from across Canada. The local organizer was Neal Madras, assisted by Michael Chen, Alfred Pietrowski, Tom Salisbury, and the staff of the Department of Mathematics and Statistics of Bethune College. The program of the seminar was organized by the three Team Leaders (Dorette Pronk, David Arthur, and Jacob Tsimerman), with additional trainer Alexander Remorov (Toronto).

The Summer Training Seminar took place at BIRS in Banff from July 3 to July 15, immediately before the team departed for the Netherlands. Training was done by the three Team Leaders, with help from Farzin Barekat, Lino Demasi, Alex Fink, and Robert Morewood. A report on the 2011 IMO by the Team Leader was published in the December 2011 issue of the CMS Notes.

More information regarding the 2011 IMO can be found at: www.cms.math.ca/MediaReleases and www.cms. math.ca/Competitions/IMO.Esso/CMS **The Asian Pacific Mathematics Olympiad**

The 22nd Asian Pacific Mathematics Olympiad (APMO) was written on March 7, 2011 in North and South America, and on March 8 in the Western Pacific and Asia, with Japan serving as the coordinating country. Of the 25 Canadian students who wrote the four-hour competition, 10 were Canada's official participants.

The top Canadian student was Alex Song (Detroit Country Day Middle School, Beverly Hills, MI, USA), who was awarded a Gold Medal. Matthew Brennan (Upper Canada College, Toronto, ON) and Hunter Spink (Western Canada High School, Calgary, AB) were awarded Silver Medals. Bronze Medals went to Heinrich Jiang (Vincent Massey Secondary School, Windsor, ON), Susan Sun (West Vancouver Secondary School, West Vancouver, BC), Daniel Spivak (Bayview Secondary School, Richmond Hill, ON), and Kaiven Zhou (Strathcona High School, Edmonton, AB). Honourable Mentions went to Yuzhou Chen (Sir John A. Macdonald Collegiate Institute, Agincourt, ON), Mariya Sardarli (Strathcona High School, Edmonton, AB), and Kevin Zhou (Woburn Collegiate Institute, Scarborough, ON).



APMO Gold Medal Winner, Alex Song

Further details regarding the APMO are available through: www.cms.math.ca/Competitions/APMO

National Math Camp

The National Math Camp is designed primarily for younger Canadian students with at least two years remaining in high school (grades 8–10) and with the potential to compete at the Mathematical Olympiad level. Participation in this camp is by invitation only.



The 2011 CMS National Math Camp took place at University of Windsor from July 11 to 16, with Richard Caron as the main organizer, and again was a big success. Twenty-two students attended the camp (8 female, 14 male). The selection process is based predominantly on the results of the COMC. All written invitations make clear the safe environment including two female Residence Assistants (that are also instructors). The organizers also offered a \$300 travel voucher to invitees outside Ontario/ Quebec. There were 13 students from Ontario, 4 from BC, 2 from Alberta, and 1 each from Saskatchewan, Quebec and Nova Scotia.

This was the final year for the National Camp to be held in Windsor. Many thanks are due to Richard Caron for a

fine job of running the Camp the last three years. He comments that hosting the Camp was a great experience and there was a feeling of accomplishment to see graduates of the National Camp do well at the IMO. The organizers were also very pleased to see many of the attendees still stay in touch on the Facebook page they created. The students use it as a forum to stay in touch socially as well as to discuss mathematics.

In 2012 the National Camp will be in Toronto, organized by Richard Cerezo. See the Education Committee report for information about other Math Camp activities.

NOMINATING COMMITTEE REPORT

Chair - James Lewis (Alberta)

Over 150 individuals contribute to the work of the CMS by serving on the CMS Board of Directors or as a CMS standing committee or sub-committee. The CMS Nominating Committee and various standing committees and boards actively solicit and recruit individuals with an interest in making a contribution to the Canadian mathematics community. The Nominating Committee is also responsible for reviewing the terms of reference for all the standing committees.

In 2011, across the standing committees, 14 appointments were made for 13 individuals. On the CMS Editorial Boards, 15 appointments were made for 15 individuals. At the sub-committee level, 23 appointments were made for 19 individuals. In addition, nine appointments were made for nine individuals for the Board of Directors. Including two other appointments, the Nominating Committee and various standing committees managed a total of 61 appointments of 58 volunteers. The net result was that at the end of 2011 there were 30 vacancies on CMS committees.

The Nominating Committee is currently working on filling these vacancies and many have already been addressed in 2012.

As the CMS moves forward it is important that the Nominating Committee invites new volunteers to work on its many initiatives and thus bring new ideas to the table and engage the next generation of the Canadian mathematics community. We are grateful to all the volunteers who have served and continue to serve in a range of duties for the CMS.

PUBLICATIONS COMMITTEE REPORT

Chair - Nantel Bergeron (York University)

The CMS Publications Committee oversees and participates in various activities of the Society related to its publications. 2012 is my first year as Chair of this committee and Ken Davidson was the Chair for the year 2011. He did a fantastic job and the affairs of the committee are in great shape; he continues to help us on the committee in 2012.

Michael Bennett, Murray Bremner, Patrick Brosnan and Zighou Hu continue to serve on this committee, and Olivier Collin is the representative of the President.

The editors-in-chief of various journals and series serve ex-officio on Publications, as well as the Executive Director and publications support personnel.



Canadian Journal of Mathematics and Canadian Mathematical Bulletin The current Editors-in-Chief of the Canadian Journal of Mathematics are Henry Kim and Robert McCann of the University of Toronto. The Editors-in-Chief of the Canadian Mathematical Bulletin are Terry Gannon and Volker Runde of the University of Alberta.

We have appointed new associate editors: Florin Diacu, Skip Garibaldi,

Robert Leon Jerrard, Anthony To-Ming Lau, Alexander Litvak, Erhard Neher, McKenzie Wang and Efim Zelmanov. Some members will retire in 2012; we will be seeking nominations for more board members soon.

The backlogs of both journals are in good shape and the online versions of preprints are now available at an early stage.

The 2011 G. de B. Robinson Award was awarded to Hugh Thomas and Alexander Yong for their paper Multiplicity-Free Schubert Calculus (CMB 53:1 (2010) 171-186). This prize honours a top paper published in CMB in 2009 or 2010. This coming year, we are seeking a strong paper in CJM published in 2010 or 2011 for this award.



CMS Notes

The Editors-in-Chief of the CMS Notes are Robert Dawson of Saint Mary's University and Srinivasa Swaminathan of Dalhousie University. John Grant McLoughlin and Jennifer Hyndman are the Education Editors, Florin Diacu is the Research Editor and Renzo Piccinin is Book Reviews Editor.

The online version of the Notes (since Jan 2012) aims to be of greater interest to our general members. Our executive and computer staff has dedicated time and energy to produce a better product and this is still underway. Suggestions are welcome.



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Crux Mathematicorum with Mathematical Mayhem

The Editors-in-Chief of Crux Mathematicorum with Mathematical Mayhem is Shawn Godin of the Ottawa Carleton District School Board. We still need to fill three vacancies on the editorial board. CRUX is in the process of developing a new plan to revitalize the publication, possibly having the Mathematical Mayhem online only.

A Taste of Mathematics

The Editor-in-Chief of the series A Taste of Mathematics (ATOM) is Alistair Lachlan of Simon Fraser University. Two books have recently appeared:

ATOM Volume XII: Transformational Geometry by Edward Barbeau (University of Toronto) ATOM Volume XIII: Quadratics and Complex Numbers by Edward J. Barbeau (University of Toronto)

CMS Books in Mathematics

Karl Dilcher and Keith Taylor of Dalhousie University are the Editors-in-Chief of the CMS Books in Mathematics Series, published by Springer. On average, two volumes per year are produced. The following three volumes were published in 2011.



Banach Space Theory, by M. Fabian, P. Habala, P. Hajek, V. Montesinos Santalucia, J. Pelant and V. Zizler (2011) 822 p.; and

Simplicial Structures in Topology, by D. Ferrario and R. Piccinini (2011) 237 p.; Convexity and Fixed Point Algorithms in Hilbert Spaces, by H. Bauschke and P. Combettes (2011) 468 p.

The CMS Treatises in Mathematics published by A.K. Peters, now part of CRC, has been discontinued.

An ad hoc subcommittee chaired by Robert McCann was formed to consider the possibility of creating a new high profile electronic journal.

The Publications Office is headed by Craig Platt of the University of Manitoba as Technical Editor and Michael Doob of the University of Manitoba as Technical Consultant. Lee-Ann Baldwin is the administrative assistant and Laura Kirkland is the technical assistant. Computer support from Steve La Rocque and administrative support from Denise Charron comes from the Ottawa office. In 2010, an additional staff person was successful in reducing the online backlog of journal. We believe that this is now under control in steady state.

We thank everyone for the efforts they have put in on this extensive publishing effort.

RESEARCH COMMITTEE REPORT Chair - David Brydges (UBC)

The CMS Research Committee oversees the research activities of the Society. This includes helping to select the scientific organizers for the summer and winter meetings, participating in the scientific organization of these meetings, playing a major role in the selection of winners for the research prizes and advising the Executive committee on research related issues.

AWARDS: The Research Committee selects the winners of the Coxeter-James, Jeffery-Williams and Krieger-Nelson Prizes. These prizes recognize outstanding contributions to research by members of the Canadian mathematical community (the Coxeter-James Prize by younger mathematicians, and the Krieger-Nelson Prize by women).

The 2011 prize winners were as follows:

- \geq Coxeter-James: Iosif Polterovich, Université de Montréal;
- \geq Jeffery-Williams: Kai Behrend, UBC; and
- Krieger-Nelson: Rachel Kuske, UBC

(Montreal) and David Brydges (UBC)

The Research Committee also appoints the members of the Doctoral Prize Selection Committee (one of whom must be a member of the Research Committee). The Doctoral Committee selected Youness Lamzouri (Ph.D. Université de Montréal, 2009) as the recipient of the 2011 Doctoral Prize for his thesis supervised by Andrew Granville.

2011 CMS SUMMER MEETING (JUNE 3-5, EDMONTON, ALBERTA)

The Scientific Directors for the meeting were Volker Runde, Hassan Safouhi (University of Alberta)). There were 17 scientific sessions. The meeting attracted 284 participants. The program included plenary lectures by Leah Edelstein-Keshet (UBC), Olga Holtz (UC Berkeley; TU Berlin), François Lalonde (Montréal), Bjorn Poonen (MIT) and Roman Vershynin (Michigan). A public lecture was given by Gerda de Vries, (University of Alberta), on Making Mathematics with Needle and Thread: Quilts as Mathematical Objects.



Prize lectures were given by Yvan Saint-Aubin (université de Montréal) – Excellence in Teaching Award, Kai Behrend (UBC) – Jeffery-Williams Prize, and Rachel Kuske (UBC) – Krieger-Nelson Prize.

2011 CMS WINTER MEETING (DECEMBER 9-12, TORONTO, ONTARIO)

The Scientific Directors were Anthony Bonato (Ryerson University,) and Juris Steprans (York University). The meeting had 21 scientific sessions. The meeting attracted 526 participants. Plenary lectures were given by Hermann Eberl (Guelph), Christina Goldschmidt (Oxford, UK), Gordon Swaters (Alberta), Craig Tracy (UC Davis) and Hugh Woodin (Berkeley).

Public lectures were given by Kumar Murty (Toronto) on The Tau of Ramanujan and by Chris Wild (Auckland, New Zealand), on The world through a bathroom window: Statistics as you've never seen it before.

Prize lectures were given by Youness Lamzouri– Doctoral Prize, and Iosif Polterovich -Coxeter-James Lecture.

STUDENT COMMITTEE REPORT

Co-Chairs - Kseniya Garaschuk (Victoria) and Sarah Plosker (Guelph)

The goal of the CMS Student Committee (StudC) is to promote interaction between Canadian post-secondary mathematics students and the Committee worked diligently in 2011 towards that goal. We hosted successful

events at the CMS Meetings, funded student initiatives, created a new award for an undergraduate student to attend the Canadian Undergraduate Mathematics Conference (CUMC), and published two volumes of our newsletter, Notes from the Margin.

Change of Membership

We would like to thank Anika Pascale (CUMC Organizing Committee President) whose term ended over the past year. We also welcome our newest members this year, Crystal Parras (CUMC Organizing Committee President) and Gary Bazdell (Webmaster).

2011 CMS Summer Meeting in Edmonton

Poster Session

The poster session was relatively small (seven posters) compared to previous meetings. As such, we gave out only one award, rather than the usual three. The AARMS Award went to Philippe Gaudreau of Campus

AARMS Award winner, Philippe Gaudreau (Alberta)

Saint-Jean, University of Alberta. The award certificate was presented at the banquet. This poster session allowed us to realize that participation from the host university is imperative for the success of the student poster session. In particular, it was unfortunate that only three students from the University of Alberta chose to participate.

Panel Discussion

Normally, we hold a panel discussion during a lunch hour on a topic of interest to students. The schedule for this meeting was so full of events, even during the normally open lunchtime, that we could not find an optimal



time to hold a panel discussion. This, combined with low interest from the students at the host institution, was the deciding factor to cancel the event and use the funds towards an additional event at the Winter meeting in Toronto.

Social

Students were invited for free glow-in-the-dark mini golf at the Putt 'N Glow at West Edmonton Mall. Flyers were included in the registration envelopes of all registered student participants. Free group taxis to the West Edmonton Mall were provided. Students could also get a bite to eat and drink upstairs in the adjoining pub. The idea was of a similar vein to our well-received bowling socials from past meetings: to have a friendly competition while getting to know one another.

2011 CMS Winter meeting in Toronto



Poster Session

There were 16 posters in this meeting's poster session. The judging went extremely smoothly, and the quality of the presentations was so high that it was hard to pick just three award recipients. In the end, the awards were as follows: the AARMS Award went to Termeh Kousha (Ottawa), the CMS President's Award went to Amanda Malloch (Victoria), and the CMS Student Committee Award went to Scott Lunney (Victoria).

CMS StudC Fields Trip

Organized in conjunction with the Fields Undergraduate Network (FUN) and held on Friday, Dec. 9th (the day before

the first day of the meeting), the entire day was devoted to students. In the morning, FUN ran several undergraduate events: a meet & greet, FUN Presentation, a lecture and Q&A, and finally an interview. StudC ran graduate-oriented events in the afternoon, which was followed by the CMS Meeting reception in the evening. StudC's events included the following: a panel discussion regarding the role of mathematics in various sectors of industry -- a dynamic discussion on what you can do with your math degree outside of academia and what you need to do to land that job; and a CV Writing Workshop – a hands-on workshop consisting of a short presentation, followed by a discussion and peer-review of CVs. The participants were invited to submit their CVs ahead of time to help the workshop coordinators zero-in on common problem areas and to get better constructive feedback. The response to the workshop was overwhelmingly positive and we plan to host events of this type more often in the future. As the workshop was held a day before the conference, Fields also provided funding to cover the extra night's accommodations for the workshop participants.

Canadian Undergraduate Mathematics Conference (CUMC)

The 2012 Canadian Undergraduate Math Conference will be held from July 11-15th in Kelowna, British Columbia. The event will be co-hosted at University of British Columbia's Okanagan campus and the Okanagan College. Those attending will have the opportunity to see what the Okanagan valley has to offer, from beaches and parks, to orchards and vineyards. Highlights of the conference will consist of one day of talks held at the College to showcase the role colleges play in undergraduate education; the conference will also feature the Women in Math and Science Dinner. The most recently confirmed addition to the conference is an

Optimization Workshop held on July 9-11th and organized by the Department of Mathematics and Computer Science at UBC's Okanagan campus. The workshop will provide undergraduate students in mathematics and computer science with an introduction to optimization, and to give students a flavour of modern optimization research. This two and a half day workshop will include introductory courses on a variety of topics as well as four presentations by researchers in optimization.

StudC Scholarship

The CMS Student Committee Scholarship for CUMC was a new initiative of the committee. Starting in 2011, this scholarship, worth \$500, is now awarded annually to an undergraduate student wishing to attend and participate in the CUMC. All applications are judged on university and mathematical community involvement, academic excellence, and research potential. The applicants are to submit a short statement of interests, their CV, and a reference letter. This year's applications were very strong and the award went to David Peterson of the University of Northern British Columbia. The award has since been re-named the CUMC Award for Excellence.

Event Sponsorship

StudC's Regional Conferences fund has been distributed to help support several student initiatives across Canada this year. One of the partially supported events was our own CMS Studc Fields trip described above; the other three events were the following:

- A social at Fields Undergraduate Network workshop an event held at Carleton University on July 22 and aimed at undergraduate math students. This event consisted of three 45-minute talks, followed by a panel discussion. The theme of the event was practical applications of discrete mathematics and was attended by students from Ottawa and Toronto. After the panel, there was a BBQ for the students and speakers.
- 5th Annual meeting of the Prairie Network for Research in the Mathematical Sciences (PNRMS), held at Luther College on the University of Regina campus on April 30, May 1 and 2, 2011. StudC has been supporting PNRMS regularly as the mandate of this meeting echoes the very idea behind the regional funding support - to encourage and advance research in the mathematical sciences in the provinces of Saskatchewan and Manitoba.
- The Ottawa-Carleton Discrete Math Days (DMD). The event is a two day workshop held annually in May, alternating between Carleton University and the University of Ottawa. The DMD was held this year at the University of Ottawa on May 13 and 14, 2011.

Student Newsletter

2011 has been a very successful year for the Notes from the Margin despite the severe cut in our original budget. We have published two professionally designed issues: the first edition in January 2011 featured one research article, one bibliographical piece, and one puzzle story; the second edition in September 2011 featured two research articles, an article in French on studying abroad, a short education-oriented piece, and a distractions page. Administrative notes appeared throughout both issues informing the readers on upcoming CMS and StudC events and funding opportunities. We have had an extremely positive response to the Margin. Cool graphics, eye-catching design and upbeat content proved to attract the readers. In fact, for the first

edition of 2012, we have received enough submissions for 12 pages of content and numerous requests from Departments across Canada for more hardcopies in the mail.

As the Margin is becoming increasingly popular, it also becomes very timeconsuming for the student editor to manage an increased number of submissions, edit them to uphold a high level of published material and deal with graphic designers, among other issues. We need to discuss a more sustainable model for this publication to continue.

Financially, we managed to stay within the 2011 budget and were very happy to see an increase in the Margin's 2012 budget. However, the only way to make Margin financially stable is to start obtaining outside sponsorship. This is our goal for the upcoming year.

StudC Website and Facebook group

<page-header><image><image><section-header><section-header><section-header><section-header><section-header><text><text><text><text><text><text><text>

Our website (http://cms.math.ca/Students/) is being completely reformatted to provide a more professional design and better layout. It is almost finished and will be launched soon after the French translation of each page is complete. StudC is in the process of re-launching its website. The website will contain up-to-date information on all of StudC's projects such as Notes from the Margin, workshops and other events at the semi-annual CMS Meetings, the Canadian Undergraduate Mathematics Conference as well as information on funding support for local student events. You can see the work in progress at http://studc.math.ca.

The committee also has a Facebook group called "CMS Students/Étudiants de la SMC". It contains information about the different activities the committee is offering, discussions related to future possible projects as well as pictures from previous events. We will be moving to the Facebook page format soon.

Looking Ahead

Overall, 2011 has been a very successful year for the Student Committee. Our ongoing projects, such as poster sessions at CMS meetings and the CUMC, are as successful as ever, while we also have many new projects taking off, including the publication of Notes from the Margin, organization of new larger-scale events at CMS meetings and the launch of CUMC Award for Excellence. With even more new ideas already in the works, we are looking forward to 2012.

WOMEN IN MATHEMATICS COMMITTEE REPORT Chair - Kathryn Hare (Waterloo)

The CMS *Women in Mathematics Committee* monitors the status of women in the Canadian mathematical community, recommends actions that will help to ensure the equitable treatment of women mathematicians, and encourages the participation of women in mathematics at all levels.

The committee suggestion that a woman in mathematics event be regularly held during Canadian Undergraduate MathematicsConferences(CUMC) appears to have been well received and an event will be planned for the 2012 CUMC.

In preparing comments for the August 2011 CMS The State of Canadian Mathematics report, it was noted that

a higher percentage of women have been hired in recent years than in the past. The committee was however disappointed to note that there are still many Canadian mathematics departments with few women faculty. The committee also noted that women can still feel isolated (junior women, in particular) and would benefit from support and encouragement from more senior women. A networking lunch/panel on mentoring was held at the June 2011 CMS meeting. This was well attended and the committee hopes it will become a regular event.

In response to the small numbers of women mathematics undergraduates continuing on to graduate school, working with the Women in Mathematics committee at the University of Waterloo, exploratory work and planning was launched for a 2012 summer school for top undergraduate women in mathematics.

The committee also continued to be concerned about the new NSERC emphasis on HQP in awarding grants and the detrimental impact this has on women who (anecdotal evidence suggests) disproportionately hold positions at institutions without graduate programs. These concerns have continued to be voiced, especially to the NSERC Long Range Plan for Mathematical and Statistical Sciences working group; the committee expects the issue of women in mathematics to be addressed as part of the recommendations of the plan.

The complete CMS Financial Statements (December 31, 2011); including notes, are posted on the CMS website; the information presented in this annex is extracted from the statements.

ANNEX A

Canadian Mathematical Society

Consolidated Statement of Financial Position

as at December 31, 2011

Société Mathématique du Canada État consolidé de la situation financière au décembre 31, 2011

	Operations			stricted Funds					
	Fund / Fonds		Soldes des Fonds			Total		Total	
	d'administration		Affectés			2011		2010	
ASSETS CURRENT ASSETS									ACTIF ACTIF À COURT TERME
Cash Short-term investments Accounts receivable Prepaid expenses Due from (to) specified fund	\$	147,147 113,859 265,727 43,712 128,371	\$	- 16,706 - (128,371)	\$	147,147 113,859 282,433 43,712	\$	64,445 83,162 376,670 42,506 -	Encaisse Placements à court terme Débiteurs Frais payés d'avance Soldes interfonds
		698,816		(111,665)		587,151		566,783	
Investments (note 6) Capital assets (note 8)		2,195 22,176		1,678,537 -		1,680,732 22,176		1,638,556 33,884	Placements (note 6) Immobillsations (note 8)
	\$	723,187	\$	1,566,872	\$	2,290,059	\$	2,239,223	
LIABILITIES CURRENT LIABILITIES									PASSIF PASSIF À COURT TERME
Accounts payable and accrued liabilities Deferred revenue (note 9)	\$	238,789 346,612	\$	۔ 199,712	\$	238,789 546,324	\$	188,087 580,086	Créditeurs et charges à payer Apports reportés (note 9)
		585,401		199,712		785,113		768,173	
FUND BALANCES									SOLDES DES FONDS
Restricted Unrestricted		۔ 137,786		1,367,160 -		1,367,160 137,786		1,341,592 129,458	Affectés Non affectés
		137,786		1,367,160		1,504,946		1,471,050	
	\$	723,187	\$	1,566,872	\$	2,290,059	\$	2,239,223	

Advancement

Avancement

The complete CMS Financial Statements (December 31, 2011); including notes, are posted on the CMS website; the information presented in this annex is extracted from the statements.

Learning

Apprentissage

Canadian Mathematical Society Statement of Revenue, Expenses and Changes

in Fund Balance, Operations Fund for the year ended December 31, 2011

Société Mathématique du Canada État des revenus, dépenses et évolution du solde des fonds, Fonds d'administration pour l'exercice terminé le 31 décembre 2011

Total

Total

129,458

\$ 137,786

68,771 Solde des fonds au début

\$ 129,458 SOLDE DES FONDS À LA FIN

	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	
DEVENUE	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010	DEVENUE
REVENUE											REVENUS
Donations	\$ 6,561	\$ 3,978	\$ 86,173	\$ 114,158	\$ 842	\$ 1,265	\$-	\$-	\$ 93,576	\$ 119,401	Dons
Grants	-	1,500	83,400	90,726	39,300	50,042	-	-	122,700	142,268	Subventions
Membership fees	144,913	135,782	-	-	-	-	-	-	144,913	135,782	Cotisations des membres
Registration fees and other sales	633	491	70,060	119,195	192,174	187,860	-	299	262,867	307,845	Inscriptions et autres ventes
Subscriptions and publications	760	2	40,287	51,695	669,626	688,161	-	-	710,673	714,356	Abonnements et publications
Foreign exchange	(1,158)	(1,106)	(54)	1,748	(2,642)	24,860			(3,854)	25,502	Devises étrangères
Services, advertising and sales	9,853	102,709	1,728	-	12,873	6,914	100,530	6,800	124,984	116,423	Publicité et ventes promotionnelles
	161,562	243,356	281,594	377,522	912,173	959,102	100,530	7,099	1,455,859	1,561,577	
EXPENSES											DÉPENSES
National projects	2,983	10,314	150,970	240,883	-	-	-	-	153,953	251,197	Projets nationaux
Speakers and prizes	433	1,431	16,249	20,470	34,798	49,738	-	-	51,480	71,639	Conférenciers et prix
Production	22,165	21,034	28,261	31,943	66,089	67,778	-	-	116,515	120,755	Production
Promotional materials	6,463	3,858	4,159	16,403	3,836	8,519	-	363	14,458	29,143	Matériel promotionnel
Salaries and benefits	292,358	206,400	114,035	131,060	243,398	303,646	66,063	18,951	715,854	660,057	Salaires et avantages sociaux
Boards and committees	32,430	34,767	8,643	14,807	62,617	66,450	-	4,363	103,690	120,387	Conseil d'administration et comités
Legal and audit	30,437	134	-	114	456	163	-	9	30,893	420	Honoraires légaux et de vérification
General administration	43,678	54,273	34,792	26,566	151,375	150,874	17,895	4,418	247,740	236,131	Frais généraux d'administration
Amortization of capital assets	7,265	2,644	-	1,601	5,683	6,707	-	209	12,948	11,161	Amortissemment des immobillisations
	438,212	334,855	357,109	483,847	568,252	653,875	83,958	28,313	1,447,531	1,500,890	
EXCESS OF REVENUE (EXPENSES	\$(276,650)	\$ (91,499)	\$ (75,515)	\$(106,325)	\$ 343,921	\$ 305,227	\$ 16,572	\$ (21,214)	\$ 8,328	\$ 60,687	EXCÉDENT DES REVENUS (DÉPENSES)

Application

Application

Discovery

Découverte

Fund balances, beginning of year

FUND BALANCES, END OF YEAR

ANNEX A

The complete CMS Financial Statements (December 31, 2011); including notes, are posted on the CMS website; the information presented in this annex is extracted from the statements.

Canadian Mathematical Society Statement of Revenue, Expenses and Changes in Fund Balances, Restricted Funds for the year ended December 31, 2011

Société Mathématique du Canada État des revenus, dépenses et évolution des soldes des fonds, Fonds affectés pour l'exercice terminé le 31 décembre 2011

							Mathematical Borwein Distingu					uished						
	L	egacy		Endow	men	t	Olympiads Fund				Career Fund							
	Fun	d / Fonds		Fund /	Fond	s	Fonds pour Olympia			npiades	Fonds Borwein de							
	de	l'héritage		de dotation			de mathématiques			carrière distinguée					Total	Total		
				Capital	Ope	rations	(Capital	Op	érations		Capital	Ope	érations		2011	2010	
REVENUE																		REVENUS
Donations	\$	-	\$	2,235	\$	-	\$	459	\$	-		2,035	\$	-	\$	4,729	\$ 2,630	Dons
Dividends, interest and other income		28,806		13,213		-		6,503		-		1,697		-		50,219	49,093	Dividendes, intérêts et autres revenus
Gain (loss) on investments due to																		Gain (perte) sur placements causé par les
change in market value		(3,946)		(1,810)		-		(891)		-		(233)		-		(6,880)	70,174	fluctuations de la valeur du marché
		24,860		13,638		-		6,071		-		3,499		-		48,068	121,897	
EXPENSES																		DÉPENSES
Projects		-		-		7,500		-		-		-		-		7,500	3,481	Projets
Service fees		8,604		3,947		-		1,942		-		507		-		15,000	15,000	Frais de courtage
Boards and Committees		-		-		-		-		-		-		-		-	1,183	Conseil d'administration et comités
Speakers and prizes		-		-		-		-		-		-		-		-	1,854	Conférenciers et prix
Other compensation		-		-		-		-		-		-		-		-	24,000	Autre rémunération
		8,604		3,947		7,500		1,942		-		507		-		22,500	45,518	
EXCESS OF REVENUE (EXPENSES)	\$	16,256	\$	9,691	\$	(7,500)	\$	4,129	\$	-	\$	2,992	\$	-	\$	25,568	\$ 76,379	EXCÉDENT DES REVENUS (DÉPENSES)
Fund balances, beginning of year	(694,266	;	389,711		9,625	1	90,496		6,126		52,293		(925))	1,341,592	1,265,213	Solde des fonds au début
Contribution from (to) operations																		Contribution des (aux) opérations
from capital				(7,193)		7,193		(3,445)		3,445		(955)		955		-	-	provenant du capital
FUND BALANCES, END OF YEAR	\$	710,522	\$:	392,209	\$	9,318	\$ 1	91,180	\$	9,571	\$	54,330	\$	30	\$	1,367,160	\$ 1,341,592	SOLDE DES FONDS À LA FIN

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CMS BOARD OF DIRECTORS AND COMMITTEES

The CMS is managed by an Executive Committee which reports to the Board of Directors. The CMS operates by enlisting the participation of our members in an extensive committee structure. The following lists include all those who have served on the CMS board and committees throughout 2011. The CMS would like to acknowledge and thank the following individuals, without whom the work done by the CMS to promote the advancement, discovery, learning and application of mathematics would not be possible.

Board of Directors (as of Dec. 31, 2011)

Tim Alderson (UNB) **David Bates** Elena Braverman (Calgary) Gerald Cliff (Alberta) Olivier Collin (Montréal) Karl Dilcher (Dalhousie) Brian Forrest (Waterloo) Eyal Goren (McGill) Bernard Hodgson (Laval) Stephen Kudla (Toronto) Ina Mette (AMS) Maung Min-Oo (McMaster) Adam Oberman (SFU) David Rodgers – Observer Hassan Safouhi (Alberta) Anna Stokke (Wininpeg) Hugh Thomas (UNB Fred.)

Martin Barlow (UBC) Jerry Bona (Illinois Chicago) Virginie Charette (Sherbrooke) James Colliander (Toronto) Chantal David (Concordia) Shannon Fitzpatrick (UPEI) Kseniya Garaschuk (Victoria) Ronald Haynes (Memorial) Jacques Hurtubise, Chair (McGill) Marcelo Laca (Victoria) Paul Mezo (Carleton) Alexander Nabutovsky (Toronto) Sarah Plosker (Guelph) Johan Rudnick (CMS) – Observer Paul Salvini (Side Effects Software) Keith Taylor (Dalhousie)

Thank you to the following members who also served in 2011:

Catherine Baker (Mt. Allison) Christopher Bose (Victoria) Clifton Cunningham (Calgary) Douglas Farenick (Regina) Vojkan Jaksic (McGill) Anna Lawniczak (Guelph) V. Kumar Murty (Toronto) Gregory Smith (Queen's)

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