

2005Annual Report to Members Rapport annuel aux membres

June 2006

Table of Contents

Report of the President and the Advancement of Mathematics Committee (AMC)
Rapport du président et du Comité pour l'avancement des mathématiques (CAM)
Executive Director's Report
Rapport annuel 2005 du Directeur administratif
Treasurer's Report9
Balance Sheet as at December 31, 2005
Statement of Revenue and expenditures year ended December 31, 2005
Budgets - Operations Fund Summary
Budgets - General and Education Divisions
Budgets - Research and Publications Divisions
Education Committee Report
Electronic Services Committee Report
Endowment Grants Committee Report
Finance Committee Report
International Affairs Committee Report
Mathematical Competitions Committee Report
Nominating Committee Report
Publications Committee Report
Research Committee Report
Student Committee Report
Women in Mathematics Committee Report
Editorial Boards
Contributors
CMS Executive Committee
CMS Board of Directors
CMS Executive Office
Publications Office

The 2005 reports from the President and the Advancement of Mathematics Committee and the Executive Director are provided in both official languages. The other reports are in the language provided by the chair.

Les rapports 2005 du président, du Comité pour l'avancement des mathématiques et du directeur administratif vous sont offerts dans les deux langues officielles. Les autres rapports sont livrés dans la langue de rédaction d'origine.

Report of the President and the Advancement of Mathematics Committee (AMC)

H.E.A. Eddy Campbell (Memorial University, St. John's, NL)

Mathematics in Canada is Stronger Again

2005 was an excellent year for mathematics in Canada. The national centre for excellence, the Mathematics of Information Technology and Complex Systems (MITACS) was renewed for another 7 year period. MITACS has a wide ranging mandate across the whole community of mathematical sciences to connect us to industry and provide new opportunities for researchers and graduate students. This renewal was a very important event for Canadian mathematics. The mathematical landscape in Canada has changed dramatically over the past decade. We now have three world-class research institutes: the centre de recherches mathématiques (CRM) in Montreal; the Fields Institute (FI) in Toronto; and the Pacific Institute for Mathematics (PIMS) in Vancouver. There is also the Banff International Research Station (BIRS) and a virtual network in the Atlantic Association for Research in the Mathematical Sciences (AARMS).

The creation of this infrastructure has led to a tremendous increase in the quality and impact of the Canadian mathematical sciences. In turn, this has led to a new sense of community, a broader view of our beloved disciplines and new cooperative ventures involving the research institutes and many of our sister organizations both inside and outside the country. It is a very exciting time to be a mathematician in Canada!

Leaders of our communities continue to work together to further the cause of the mathematical sciences. We have formed a Liaison Committee with representatives from across the community to represent our common interests at the Natural Sciences and Engineering Research Council (NSERC). A document seeking to build a common vision for the future of the mathematical sciences in Canada is in draft form. Much has been done but there is much work remaining. It is critically important for our communities to remain politically engaged and to identify the next generation of leaders.

Our prizes continue to attract outstanding nominations. The quality of these nominations from all over the country speaks to the real and growing strength of mathematics in Canada. We have every reason to celebrate and to take pride. The CMS is a key player in promoting and enhancing Canadian mathematics. Our regular activities continue to flourish as you will see from the annual reports from our committees. Our regular meetings attract a large numbers of participants and increasingly are held jointly with our sister organizations. We have a very active publications programme, excellent high school mathematics competitions, both at the national and international level, a vibrant Math Camps program (there were 14 in 2005 with at least one camp in every province), electronic services for the community, and the Endowment Grants Competition. In my home province of

Newfoundland and Labrador, my colleagues in the Department of Mathematics & Statistics are involved in collaboration with local high school teachers, in a "Mathematics League". Students in grades 10, 11 and 12 gather on Saturday mornings in teams to work on carefully selected problems. Notably, many young women are involved.

The Math Camps Program is an essential feature of our outreach programs. It is a great pleasure to acknowledge the on-going support of the Imperial Oil Foundation.

Canada Mathematics Forum

The 2005 Canadian Mathematics Education Forum was held in Toronto from May 6 - 8. The three co-chairs of the 2005 Forum were Florence Glanfield (Saskatchewan), Bradd Hart (McMaster) and Frédéric Gourdeau (Laval). The Forum brought together mathematics educators and administrators from universities and schools across the country with the goal of improving the teaching of mathematics in our schools.

The overall theme of the 2005 forum was "Why Teach Mathematics?" The format of the forum consisted of both plenary sessions and working group sessions. These included: approaches to early numeracy and age-appropriate mathematics education; strategies for increasing the number of highly qualified students in mathematically intense programs in science and engineering; mathematics education for students at risk; effective approaches to the education of all mathematics educators; and mathematics education and the aboriginal community. The working groups in the forum developed projects, initiatives, and statements that outline ways in which Canadians can address these issues and concerns.

Moreover, many provincial associations of mathematics teachers want to stay in contact and further develop the links created at the 2003 Forum in Montreal. The Advancement of Mathematics Committee has recommended that these Fora be held every three or four years and plans are underway to hold the next forum in the West.

Math in Moscow

We are delighted to acknowledge that NSERC has renewed its support for the Mathematics in Moscow program. In 2005, three scholarships were awarded (one at \$10,000 and two at \$9,500). These scholarships enabled Canadian students, registered in a mathematics or computer science program, to attend a semester at the Independent Moscow University. The calibre of students applying is truly outstanding.

President's and AMC Report - Continued

Coxeter Commemorative Events

The CMS was a partner in the Renaissance Banff Conference held July 31 – August 3, 2005. The Banff Renaissance Conference was part of the International Bridges Conferences on Mathematical Connections in Art, Music and Science. The Conference was an initiative of Robert Moody and a collaborative effort by PIMS, the Banff Centre, the CMS and the Bridges Conferences. The last day of the event was designated as Coxeter Day in commemoration of the life and mathematics arts connections of Donald Coxeter. The proceedings have been published and copies are available from the CMS Office in Ottawa at \$25.00 (including shipping). You will find information on the Bridges Conferences at: www.sckans.edu/~bridges. The link to the 2005 Conference is www.pims.math.ca/RenaissanceBanff/

Membership Drive

During the past year, the President and Thomas Salisbury (President-elect) sent letters to the chairs and heads of all mathematics related departments throughout the country highlighting the advantages of being a CMS member. A membership retention program has been instituted which involves contacting members who have neglected to renew via telephone and email. Allowing our members to join on-line makes the task easy and convenient. A source of potential new members is researchers in theoretical computer science as they have no home society in Canada. It is hoped that plenary lectures and sessions with such a focus will be featured at our semi-annual meetings.

Financial difficulties of the CMS

As our activities continue to grow, the cost of our activities used all of our available resources, and a deficit is projected for the fiscal year 2005. The Finance Committee formed a Task Force to examine all of our activities and to suggest ways and means of balancing the budget. In addition, the Board voted at its June meeting to create a fundraising arm to develop our capacity to support our many worthwhile membership, educational, research and promotional activities. A strategy is being developed to raise funds from a variety of sources including corporate sponsorship, major gifts, planned giving and annual giving.

The Imperial Oil Foundation continues to be the Title Sponsor of the National and Regional Math Camps. Sun Life Financial also continues as the Major Sponsor for the Canadian Mathematical Olympiad. Approaches have been made to provincial ministries of education to support our wide array of education activities. The NSERC PromoScience grant has been renewed for 3 years in support of our Math Camps program.

Challenges

The CMS is facing many challenges for the next year. We are forecasting a balanced budget which will require that new revenues are generated if we wish to maintain our current level

of activity. We must ensure that newly hired faculty join the CMS and become volunteers for our activities. We need them to help increase the visibility of mathematics everywhere in the country and work so that mathematics becomes more popular in our schools. I would ask each of you to consider doing some recruiting in your own institution. The Executive Office can help you by sending you a brochure on the benefits of membership mpdesk@cms.math.ca.

Thanks

We are extremely grateful to all the volunteers who work throughout the country bringing success to our activities: scientific and local organizers of meetings, members of our committees, organizers of our educational activities, editors of our journals, contributors to our publications. Special thanks go to the members of the staff of the Executive Office: each new activity brings fresh work to the Office. I owe a particular vote of thanks to Graham Wright and Tom Salisbury who have been a tremendous help and whose support has been invaluable. And we are very grateful to our many partners, sponsors and supporters.

Advancement of Mathematics Committee (AMC)

H.E.A. Eddy Campbell (Memorial), Chair

Richard Caron (Windsor)

Edgar Goodaire (Memorial)

Robert Woodrow (Calgary)

Christiane Rousseau (Montréal) Past President to June 30

Thomas Salisbury (York) President-Elect from July 1

F. Arthur Sherk (Toronto) (Treasurer)

Graham P. Wright (CMS) (Executive Director)

Fundraising Committee

H.E.A. Eddy Campbell (Memorial), Chair

Christiane Rousseau (Montréal) Past President to June 30

F. Arthur Sherk (Toronto) (Treasurer)

Robert Woodrow (Calgary) (AMC)

Graham P. Wright (CMS) (Executive Director)

The Fundraising Committee is a sub-committee of the AMC.

Rapport du président et du Comité pour l'avancement des mathématiques (CAM)

H.E.A. Eddy Campbell (Université Memorial, St. John's, T.-N.-L.)

Les mathématiques au Canada : de plus en plus vivantes

L'année 2005 a été une excellente année pour les mathématiques au Canada. Le Réseau de centres d'excellence en mathématiques des technologies de l'information et des systèmes complexes (MITACS) a vu à nouveau son financement renouvelé pour sept ans. Le Réseau MITACS, qui a un mandat très large auprès de toute la communauté mathématique, est notre contact privilégié avec l'industrie et offre de nouvelles avenues aux chercheurs et aux étudiants diplômés. Il s'agit d'un renouvellement très important pour la communauté mathématique canadienne. Le profil mathématique du Canada a subi une profonde transformation au cours des dix dernières années. Nous avons désormais trois instituts de recherche de renommée mondiale : le Centre de recherches mathématiques (CRM) à Montréal; l'Institut Fields (FI) à Toronto et l'Institut du Pacifique pour les sciences mathématiques (PIMS) à Vancouver. Nous avons également la Station de recherche internationale de Banff (SRIB), ainsi qu'un réseau virtuel sous le nom de l'Association pour l'avancement de la recherche mathématique en Atlantique (AARMA).

La création de cette infrastructure a rehaussé considérablement la qualité et l'influence des mathématiques canadiennes, ce qui s'est traduit pas un nouveau sentiment d'appartenance, une perspective élargie de nos chères disciplines et la création de nouveaux partenariats avec nos instituts de recherche et de nombreux homologues du pays et de l'étranger. La profession mathématique ne manque certes pas d'intérêt au Canada ces temps-ci!

Les leaders de nos communautés collaborent toujours à l'essor des sciences mathématiques. Nous avons formé un comité de liaison avec des représentants de toute la communauté pour représenter nos intérêts communs au Centre de recherches en sciences naturelles et en genie (CRSNG). Nous avons entrepris la rédaction d'un document décrivant une vision commune de l'avenir des mathématiques au Canada. Le travail progresse bien, mais il reste encore beaucoup à faire. Il est extrêmement important pour nos communautés de demeurer engagées politiquement et de former la prochaine génération des leaders.

Nos prix suscitent toujours autant de candidatures exceptionnelles. La qualité des candidats de toutes les régions du pays illustre la force réelle et croissante des mathématiques au Canada. Nous avons de nombreuses raisons de nous réjouir et d'être fiers. La SMC est un acteur important de la promotion et du développement des mathématiques au Canada. Nos activités habituelles évoluent toujours, comme vous le verrez dans le rapport annuel de nos comités. Nos Réunions attirent de plus un grand nombre de participants et sont de plus en plus souvent tenues en partenariat avec d'autres associations sœurs. Nous avons en outre un programme de publications très chargé, d'excellents concours de mathématiques pour élèves du secondaire, tant au niveau national

qu'international, des camps mathématiques très dynamiques (14 en 2005, dont au moins un par province), des services électroniques offerts à l'ensemble de la communauté et le concours de bourses du fonds de dotation. Chez moi, à Terre-Neuve-et-Labrador, mes collègues du Département de mathématiques et de statistique ont formé une « ligue de mathématiques » en collaboration avec des enseignants du secondaire. Des élèves de 10e, 11e et 12e année se réunissent les samedis matins et forment des équipes pour résoudre des problèmes soigneusement choisis. Soulignons qu'un grand nombre de filles participent à ces activités.

Les camps mathématiques sont un élément important de nos programmes de sensibilisation. Je remercie chaleureusement la Fondation philanthropique Pétrolière Impériale de son appui continu.

Forum canadien sur l'enseignement des mathématiques

Le Forum canadien sur l'enseignement des mathématiques 2005 s'est tenu à Toronto du 6 au 8 mai 2005. La coprésidence du forum 2005 était assurée par Florence Glanfield (Saskatchewan), Bradd Hart (McMaster) et Frédéric Gourdeau (Laval). Ce forum a réuni des enseignants de mathématiques et des administrateurs d'universités et d'écoles de tout le pays, toujours dans l'optique d'améliorer l'enseignement des mathématiques dans nos écoles.

Le forum 2005 s'est déroulé sous le thème « Pourquoi enseigner les mathématiques? » Le programme offrait des conférences plénières ou principales ainsi que des séances de travail en groupe sur divers sujets : stratégies d'enseignement des notions de calcul à la petite enfance et enseignement des mathématiques adapté à l'âge des enfants; stratégies d'augmentation du nombre d'étudiants très forts en mathématiques dans les programmes de sciences et de génie à forte teneur mathématique; l'enseignement des mathématiques aux élèves à risque; méthodes efficaces d'enseignement aux futurs enseignants de mathématiques; l'enseignement des mathématiques aux Autochtones. Les groupes de travail formés lors du Forum ont élaboré des projets, des initiatives et des énoncés proposant des moyens de surmonter ces difficultés au Canada.

On constate de plus une volonté, chez les associations provinciales d'enseignants de mathématiques, d'entretenir et de renforcer les liens créés au Forum de 2003. Le Comité pour l'avancement des mathématiques a recommandé que ces forums se tiennent tous les trois ou quatre ans. Des démarches pour l'organisation d'un prochain forum dans l'Ouest sont déjà en marche.

Math à Moscou

Nous sommes enchantés d'annoncer que le CRSNG a renouvelé son financement au programme Math à Moscou. En 2005, trois bourses ont été accordées (une de 10 000 \$ et deux de 9 500 \$). Grâce à ces bourses, trois étudiants du Canada inscrits à un programme de mathématiques ou d'informatique ont pu suivre

Rapport du président et du CAM-suite

un semestre d'études à l'Université indépendante de Moscou. Le calibre des étudiants qui présentent une demande est absolument remarquable.

Activités en hommage à Donald Coxeter

La SMC a été partenaire de la Banff Renaissance Conference qui s'est déroulée du 31 juillet au 3 août 2005, dans le cadre des International Bridges Conferences on Mathematical Connections in Art, Music and Science. La conférence de Banff était une initiative de Robert Moody et un effort concerté du PIMS, du Banff Centre, de la SMC et des Bridges Conferences. Le dernier jour de cette rencontre a été consacré à Donald Coxeter, en hommage à la vie de cet homme et aux liens qu'il a créés entre les mathématiques et l'art. Il est possible de se procurer les actes de ce congrès au Bureau de la SMC à Ottawa au coût de 25 \$ (frais d'expédition compris). Pour de plus amples renseignements sur les Bridges Conferences, passez au www.sckans.edu/~bridges. Le site des conférences de 2005 est logé au www.pims.math.ca/RenaissanceBanff/.

Campagne de recrutement

Au cours de la dernière année, le président et Thomas Salisbury (président élu) ont écrit aux directeurs ou chefs de tous les départements de mathématiques ou de domaines connexes du pays pour faire valoir les avantages de l'adhésion à la SMC. Un programme de fidélisation des membres, consistant notamment à communiquer avec les membres qui n'ont pas renouvelé leur adhésion par téléphone ou par courriel, a été mis en place. En outre, la possibilité de devenir membre en ligne facilite grandement la tâche de tout le monde. Les chercheurs en informatique théorique constituent notamment un bassin potentiel de nouveaux membres, puisque ces chercheurs n'ont pas de société spécialisée au Canada. Nous espérons que les conférences principales et autres sessions de nos Réunions semestrielles toucheront ce domaine dans un avenir rapproché.

Difficultés financières de la SMC

Nos activités ne cessent de croître, et nous avons atteint la limite des ressources disponibles pour les financer. Nous prévoyons donc un déficit pour 2005. Le comité des finances a formé un groupe de travail chargé de revoir l'ensemble de nos activités et de suggérer des moyens d'équilibrer le budget. En outre, le conseil d'administration a approuvé, en juin dernier, la création d'un secteur « développement », dont le mandat serait de trouver des fonds supplémentaires pour financer nos nombreuses activités de recrutement, d'éducation, de recherche et de promotion. Nous élaborons en ce moment une stratégie dont l'objectif sera de recueillir des fonds de diverses sources, notamment par les commandites privées, les dons de grande envergure, les dons planifiés et les dons annuels.

La Fondation philanthropique Pétrolière Impériale a renouvelé son engagement comme commanditaire en titre des camps nationaux et régionaux. La Financière Sun Life conserve pour sa part son titre de commanditaire principal de l'Olympiade mathématique du Canada. Nous avons entrepris des démarches auprès des ministères de l'Éducation provinciaux pour le financement de notre vaste gamme d'activités éducatives. De plus, la subvention du programme PromoScience du CRSNG – qui finance nos camps mathématiques – a été renouvelée pour trois ans.

Des obstacles à surmonter

La SMC a de nombreux obstacles à surmonter au cours des prochaines années. Pour équilibrer notre budget et poursuivre nos activités sans les réduire, nous avons besoin de nouvelles sources de revenus. Nous devons faire en sorte que les nouveaux professeurs embauchés par les départements adhèrent à la SMC et deviennent des bénévoles actifs au sein de notre organisme. Nous avons besoin d'eux pour accroître la visibilité des mathématiques partout au pays et pour mousser leur popularité dans nos écoles. J'aimerais demander à chacun d'entre vous de faire du recrutement actif dans votre établissement : demander notre dépliant sur les avantages de l'adhésion à la SMC en écrivant au bureau administratif à l'adresse suivante : adhesions@smc.math.ca.

Remerciements

Nous sommes extrêmement reconnaissants envers les bénévoles qui contribuent, d'un bout à l'autre du pays, au succès de nos activités : ceux et celles qui organisent le programme scientifique et la logistique des Réunions, qui siègent à un comité, qui organisent nos activités éducatives, qui assurent la rédaction de nos revues ou qui collaborent à nos publications. Je remercie tout particulièrement le personnel du bureau administratif, pour qui chaque nouvelle activité de la SMC amène un surcroît de travail. Je dois un merci tout particulier à Graham Wright et à Tom Salisbury pour leur aide si précieuse et leur soutien inestimable. Sans oublier un grand merci à nos nombreux partenaires, commanditaires et sympathisants.

Comité pour l'avancement des mathématiques (CAM)

H.E.A. Eddy Campbell (Memorial), président

Richard Caron (Windsor)

Edgar Goodaire (Memorial)

Robert Woodrow (Calgary)

Christiane Rousseau (Montréal) présidente sortante au 30 juin

Thomas Salisbury (York) président-élu du 1 juillet

F. Arthur Sherk (Toronto) (trésorier)

Graham P. Wright (SMC) (directeur administratif)

Comité de la collecte de fonds

H.E.A. Eddy Campbell (Memorial), président

Christiane Rousseau (Montréal) présidente sortante au 30 juin

F. Arthur Sherk (Toronto) (trésorier)

Robert Woodrow (Calgary) (CAM)

Graham P. Wright (SMC) (directeur administratif)

Le Comité de la collecte de fonds est un sous-comité du CAM.

Executive Director's Report

Graham P. Wright (Ottawa)

General:

As the activities of the Society continue to expand, effective administration by the staff in Ottawa is particularly important. I would like to thank and acknowledge all of the staff for their help and support in making 2005 a successful and productive year.

In late 2004, the Society entered into an agreement with the Statistical Society of Canada (SSC) to provide membership and related services for the SSC. Although the transition was more complicated than had been anticipated, the Executive Office staff handled the situation very well. With the transitional period over and with a year of experience of handling the required duties, the work-load is now more controlled and systematic. The current arrangements will be reviewed in 2006 prior to a new agreement being negotiated in 2007.

I am happy to report that the campaign to attract new members has been relatively successful. Most new memberships have arisen from the 2 for 1 special offer for those who have never been CMS members. In December 2005, the Board passed a motion that, effective 2006, members who are students or pre-university teachers will receive a subscription to CRUX with MAHYEM as a benefit of membership. This benefit should be very attractive to teachers and students and should help to increase these members.

At the December meeting, the Board of Directors accepted the Report of the Ad-hoc Committee on the CMS Deficit Situation. Some of the recommendations contained in the report for reducing expenditures and for increasing revenues have been implemented already.

The 2005 election of officers and directors went smoothly and I would like to thank the members of the Nominating Committee for their efforts in securing excellent candidates to serve on the Executive Committee and the Board of Directors. As of June 30, 2005, a number of officers and directors ended their term. I wish to acknowledge the valuable leadership and support of Christiane Rousseau during her four-year term on the Executive Committee (President-elect (2001-2002), President (2002-2004) and Past President (2004-2005)). I also wish to thank Jon Thompson (New Brunswick – Fredericton), Steven Boyer (UQAM), Kathryn Hare (Waterloo), and Samuel Shen (Alberta) for their important contributions as members of the Executive Committee from 2003 to 2005. The CMS extends its thanks and gratitude to those directors who ended their four-year terms in June 2005.

Fundraising:

One of the most important matters, approved by the Board of Directors in June 2005, was the decision for the Society to develop a professional fundraising strategy and to establish an

agreement with Queen's Advancement External Services to assist in this endeavour.

The position of a full-time Development Coordinator has been established and it is hoped to fill the position in early 2006. Initially it will be a two-year contract position. Further details of the Society's fundraising plans are contained in the President's Report.

The future will see a greater emphasis on fundraising so that the Society can maintain and, where possible, expand the many programs that assist the development of mathematics in Canada.

Fundraising Update:

The CMS is pleased to announced that we have hired Mark Bowman as the Society's Development Coordinator. Mark began his responsibilities on March 6, 2006 and has already brought his considerable experience and talent to this new position in developing the Society's fundraising strategy including preparation of proposals for corporate sponsorship and a review of annual giving capacity.

Publications and Electronic Services:

In 2005, as has been the case for many years previously, all of the Society's periodicals appeared on-time or well ahead of schedule. This could not be accomplished without the significant efforts of all of the editors-in-chief, the members of the various editorial boards, and particularly the staff of the CMS Publications Office in Winnipeg under the direction of Craig Platt (Manitoba).

Although the production of CMS periodicals has been impressive, more efforts are needed to maintain and increase periodical subscriptions. An analysis of existing subscribers has been performed and a focuses for 2006 will be contacting mathematics departments, agents, and librarians to increase subscriptions to the Canadian Journal of Mathematics, the Canadian Mathematical Bulletin and CRUX with MAYHEM, particularly to encourage combined subscriptions.

Several years ago, the CMS entered into a co-publishing agreement with the American Mathematical Society for the CMS Tracts in Mathematics Series. Since no books were ever published in this series, regretfully, the Publications Committee recommended and the Board of Directors agreed that the series be terminated. The CMS and AMS were disappointed that nothing had come of the series and the AMS agreed to terminate the agreement as of March 2005.

The CMS Book Series with Springer is very successful. By the end of 2005, a total of 24 books have been released with several volumes having sales of over 1000 copies to-date. Four new

Executive Director's Report - Continued

books appeared in 2005 and 12 books are under contract or in production. Jonathan Borwein (Dalhousie) has been one of the Editors-in-Chief since the CMS Book Series was started and, effective December 31, 2005 he stepped down as an Editor-in-Chief and Keith Taylor (Dalhousie) was appointed to replace him. The considerable success of the CMS Book Series is due in large part to the significant efforts of Jonathan Borwein.

The fifth volume in the ATOM (A Taste of Mathematics) Series, *Combinatorial Explorations*, was published in 2005. The sixth volume, *Problems for Mathematics Leagues – II*, should be published in early 2006 with four more volumes appearing before the end of 2006.

One of the recommendations of the Ad-hoc Committee on the CMS Deficit was to increase publication revenues. I am pleased to report that a number of new publishing initiatives have been instituted.

A new agreement has been signed with A.K. Peters for a new series, the CMS Treatises in Mathematics. The CMS will act at the publisher and be responsible for the production of each volume in the series with A.K. Peters responsible for marketing and promotion. As publisher, the CMS will be signing contracts with prospective authors and for making corresponding royalty payments. The Board of Directors has approved a preliminary version of the agreement between the CMS and authors. The CMS is very pleased that the first Editorial Board for the CMS Treatises in Mathematics consists of James Arthur (Toronto), Ivar Ekeland (UBC), Arvind Gupta (Simon Fraser), Barbara Keyfitz (Fields/Houston), and François Lalonde (Montréal).

The CMS is also entering into a co-publishing agreement with the Mathematical Association of America for a series of books in problem solving. It is expected that the final agreement will be approved by the Board in June 2006. The initial books in this series will feature the wealth of problems posed by Murray Klamkin and some of will feature a collection of some of the ATOM books.

In cooperation with Jonathan Borwein, the CMS Associate Publisher, new publishing initiatives have been instituted which should help bring increased publishing revenues in the future.

With the assistance of Nathalie Blanchard, Alan Kelm and David Rodgers, Chair of the Electronic Services Committee, work has begun on improving and updating the CMS web site. The proposed changes have been enthusiastically received and it is hoped that, to some extent, the new site and some new pages will be released in June 2006.

Meetings:

The 2005 Canadian School Mathematics Forum, hosted by the Fields Institute, took place from at the University of Toronto from May 6-8. There were 183 participants from all sectors connected to education in mathematics and from all the provinces and territories of Canada.

The CMS/CSHPM Summer 2005 Meeting (June 4-6), hosted by the University of Waterloo, featured 23 special sessions and 10 plenary and prize lectures. This was one of the largest meetings in Society history with 541 participants.

The CMS Winter 2005 Meeting (December 10-12), hosted by the University of Victoria, involved 15 special sessions and 8 plenary and prize lectures. This meeting was very successful with 395 participants.

Although the CMS Executive Office is providing a greater level of assistance for our meetings, all of our meetings depend on the support of the host university, the research institutes, and the crucial work done by the meeting directors, the chairs of the local arrangement committees and the many special session organizers. The CMS is very grateful to all those who helped make our 2005 meetings extremely successful.

Thanks:

The Society's continued success would not be possible with the help and support of the members, particularly those who volunteer on CMS committees and editorial boards. With the support of all of those involved with our many activities, I am sure that 2006 will be another successful year.

Rapport annuel 2005 du Directeur administratif

Graham P. Wright (Ottawa)

Généralités

Plus la Société intensifie ses activités, plus il est important qu'elle puisse compter sur un personnel efficace à son bureau d'Ottawa. J'aimerais remercier tous les membres du personnel du bureau administratif, dont la liste figure à la page YYY, d'avoir contribué à faire de 2005 une année productive et couronnée de succès.

À la fin de 2004, la Société a conclu une entente avec la Société statistique du Canada (SSC) en ce qui concerne les services d'adhésion et autres. Même si la transition a été plus complexe que prévu, le personnel du bureau administratif a très bien su gérer la situation. Maintenant la période de transition terminée et après une année d'expérience, la charge de travail est mieux structurée et plus facile à gérer. L'entente actuelle sera revue en 2006 avant le renouvellement qui sera négocié en 2007.

À ma grande joie, notre campagne de recrutement produit de bons résultats. La plupart de nos nouvelles adhésions découlent de notre offre « 2 pour 1 » aux personnes qui n'ont jamais été membres de la SMC. En décembre 2005, le conseil d'administration (CA) a résolu qu'à compter de 2006, tous les membres étudiants ou enseignants au niveau préuniversitaire recevront un abonnement au *CRUX with MAHYEM* avec leur adhésion. Cet avantage devrait être particulièrement séduisant pour les enseignants et les étudiants, et devrait contribuer à gonfler le nombre de membres de cette catégorie.

À sa réunion de décembre, le CA a accepté le rapport du comité spécial chargé d'étudier le problème du déficit budgétaire. Les auteurs de ce rapport ont notamment recommandé une réduction des dépenses et une augmentation des revenus, recommandations qui ont déjà été adoptées.

En 2005, l'élection des membres du CA et de l'exécutif s'est très bien déroulée. J'aimerais remercier les membres du comité des mises en candidature d'avoir recruté d'excellents candidats pour siéger au comité exécutif et au CA. Plusieurs membres de ces deux entités ont achevé un mandat au 30 juin 2004. J'aimerais remercier en particulier Christiane Rousseau de son leadership et de son appui exceptionnel au cours de ses quatre années au comité exécutif (présidente élue — 2001-2002, présidente — 2002-2004 et présidente sortante — 2004-2005). Merci aussi à Jon Thompson (Nouveau-Brunswick — Fredericton), Steven Boyer (UQAM), Kathryn Hare (Waterloo) et Samuel Shen (Alberta) de leur grande contribution en tant que membres du comité exécutif de 2003 à 2005. La SMC remercie aussi chaleureusement tous ses administrateurs qui ont terminé un mandat de quatre ans en juin 2005.

Campagne de financement

L'une des décisions les plus importantes prises par le CA en juin 2005 aura été d'embaucher un professionnel du financement, qui recevra l'appui du service d'avancement externe de l'Université Queen's, grâce à une entente conclue avec la SMC.

La SMC a créé le poste de coordonnateur du développement (poste à plein temps), qu'elle espère pourvoir au début de 2006. Pour commencer, le poste sera un contrat de deux ans. Le rapport du président contient de plus amples renseignements sur les projets de financement de la Société.

Au cours des années à venir, la Société consacrera plus d'énergie à son financement afin de pouvoir maintenir ses nombreuses activités et, dans la mesure du possible, enrichir les nombreux programmes qui contribuent à l'essor des mathématiques au Canada.

Financement - Dernières nouvelles :

La SMC est heureuse d'annoncer l'embauche de Mark Bowman au poste de coordonnateur du développement. Mark est entré en fonction le 6 mars 2006 et a déjà mis à profit sa vaste expérience et son grand talent dans l'élaboration de la stratégie de financement de la SMC. Il a notamment rédigé des propositions de commandite privé et analysé le potentiel d'une campagne de don annuel.

Publications et services électroniques

En 2005, comme depuis plusieurs années, tous les périodiques de la Société ont paru à la date prévue ou même bien avant. Une telle promptitude n'aurait pas été possible sans le travail considérable de tous les rédacteurs en chef, des membres des comités de rédaction et, en particulier, du personnel du bureau des publications de la SMC à Winnipeg, sous la direction de Craig Platt (Manitoba).

Bien qu'impressionnante, la production des périodiques de la SMC nécessite de plus amples efforts si nous souhaitons maintenir, voire augmenter le nombre d'abonnements. Après une analyse des abonnés actuels, la SMC communiquera, en 2006, avec les départements de mathématiques, les agents et les bibliothécaires de manière à accroître le nombre d'abonnements au *Journal canadien de mathématiques*, au *Bulletin canadien de mathématiques* et au *CRUX with MAYHEM*, notamment pour encourager les abonnements combinés.

Il y a plusieurs années, la SMC a conclu une entente de publication en partenariat avec l'American Mathematical Society concernant la collection des « Traités de mathématiques de la SMC ». Comme aucun ouvrage n'a été publié dans cette collection, le comité des publications a recommandé, avec regret, l'abolition de cette collection, recommandation qui a été acceptée par le CA. La

Rapport du directeur administratif - suite

SMC et l'AMS sont déçus que cette collection n'ait rien produit, et l'AMS a accepté de résilier l'entente en mars 2005.

Par contre, la collection « Ouvrages de mathématiques de la SMC », en collaboration avec Springer, connaît un franc succès. À la fin de 2005, elle comptait 24 ouvrages publiés, dont plusieurs titres vendus à plus de 1000 exemplaires. Quatre nouveaux ouvrages ont paru en 2005, et 12 font l'objet d'un contrat ou sont en cours de production. Jonathan Borwein (Dalhousie), l'un des rédacteurs en chef depuis la création de la collection, a terminé son mandat le 31 décembre 2005 et a été remplacé par Keith Taylor (Dalhousie) à ce poste. Pour le vif succès des « Ouvrages de mathématiques de la SMC », nous sommes largement redevables au travail assidu de Jonathan Borwein.

Le cinquième volume de la collection ATOM (Aime-t-on les mathématiques), intitulé *Combinatorial Explorations*, a aussi paru en 2005. Le sixième volume, *Problems for Mathematics Leagues* -- *II*, devrait pour sa part paraître au début 2006, et quatre autres titres sont prévus avant la fin de 2006.

L'une des recommandations du comité spécial chargé de la question du déficit était d'accroître les revenus tirés des publications. Or, je suis heureux d'annoncer qu'un certain nombre d'initiatives ont été adoptées à cet effet.

La SMC a signé une nouvelle entente avec A.K. Peters au sujet d'une nouvelle collection, les « Traités mathématiques de la SMC ». La SMC sera l'éditeur de la collection et se chargera de la production de chaque volume, et A.K. Peters s'occupera du marketing et de la promotion. En tant qu'éditeur, la SMC signera des contrats avec des auteurs potentiels et versera les redevances exigées. Le CA a approuvé une version préliminaire de l'entente entre la SMC et les auteurs. La SMC est ravie de la composition du premier comité de rédaction de cette nouvelle collection : James Arthur (Toronto), Ivar Ekeland (UBC), Arvind Gupta (Simon Fraser), Barbara Keyfitz (Fields/Houston) et François Lalonde (Montréal).

La SMC a également signé une entente de publication en partenariat avec la Mathematical Association of America pour une collection d'ouvrages sur la résolution de problèmes. On s'attend à ce que le CA approuve l'entente finale en juin 2006. Les premiers livres de cette collection porteront sur le grand nombre de problèmes posés par Murray Klamkin, et certains présenteront un regroupement de quelques-uns des ouvrages de la collection ATOM.

En collaboration avec Jonathan Borwein, éditeur associé de la SMC, de nouvelles initiatives de publication ont vu le jour; celles-ci devraient favoriser la croissance des revenus de publication au cours des prochaines années.

Grâce au travail de Nathalie Blanchard, Alan Kelm et David Rodgers (président du comité des services électroniques), l'amélioration et la mise à jour du site Web de la SMC vont bon train. Les changements proposés ont été reçus avec enthousiasme, et le nouveau site devrait être public en juin 2006.

Réunions

Le Forum canadien sur l'enseignement des mathématiques 2005, tenu à l'Institut Fields, a eu lieu à l'Université de Toronto du 6 au 8 mai. Ce Forum a réuni 183 participants de tous les secteurs liés à l'enseignement des mathématiques et de toutes les provinces et territoires du Canada.

La Réunion d'été SMC/SCHPM 2005 (4-6 juin), tenue à l'Université de Waterloo, présentait 23 sessions spéciales et 10 conférences principales ou de lauréats. Attirant quelque 541 participants, ce congrès aura été l'un des plus courus de l'histoire de la Société.

La Réunion d'hiver 2005 de la SMC (10-12 décembre), tenue à l'Université de Victoria, a accueilli 15 sessions spéciales et 8 conférences principales ou de lauréats. Ce congrès des plus réussis a attiré 395 participants.

Même si le bureau administratif de la SMC a accentué son aide à l'organisation des Réunions, toutes dépendent du soutien de l'établissement hôte, des instituts de recherche, du travail essentiel des directeurs de la Réunion, des présidents du comité de logistique et des nombreux organisateurs de sessions. La SMC doit une fière chandelle à toutes les personnes qui ont contribué à l'immense succès de ses Réunions en 2005.

Remerciements

Le succès continu de la Société ne serait pas possible sans l'appui de ses membres, en particulier de ceux et celles qui siègent aux divers comités de la SMC et aux comités de rédaction. Compte tenu de l'extraordinaire participation de toutes ces personnes à l'organisation de nos nombreuses activités, je suis certain que 2006 sera une autre année fructueuse.

Treasurer's Report

Arthur Sherk

In the Operations accounts (General, Education, Research, Publishing) there was an overall deficit of \$13,026. While any deficit is regrettable, this relatively small deficit indicates considerable recovery from larger financial difficulties encountered in the two previous years. Much of the credit for the improvement must go to the staff and to the committee chairs in exercising restraint. We are also seeing some improvement in revenue sources such as membership and contributions. Also, we are working on new marketing techniques for our periodicals that are designed to increase both revenue and efficiency of operation.

We continue to work on a proposed division of investments into genuine Endowment funds and a Contingency fund. The latter will be dedicated to guaranteeing that the Operations fund runs smoothly, by receiving Operations surpluses and covering deficits. It is also being used currently to cover the expenses of our new fundraising activities. The best guarantee of future financial health of our Society is the success of these new fundraising activities.

On a personal note, I finish thirteen years as Treasurer with this report. In that time I have been privileged to work with many society members, and it has been an honour to do so. My sincere thanks to all.

Balance Sheet as at December 31, 2005

ASSETS	Operations Fund \$	Designated Activities Fund \$	Endowment Fund \$	Mathematical Olympiad Fund \$	Borwein Distinguished Career Fund \$	2005 \$ Total	2004 \$ Total
Current Assets							
Cash	124,318					124,318	85,749
Temporary Investments	183,568					183,568	15,693
Accounts receivable and accrued interest	289,167		20,220			309,387	433,204
Budget advances	9,845					9,485	10,228
Prepaid expenses	46,704					46,704	59,116
Interfund receivable (payable)	12,325	55	(12,673)	276	17		
	665,927	55	7,547	276	17	673,822	603,990
Investments	1,935	4,147	1,353,220	187,096	50,562	1,596,960	1,637,795
Capital assets	22,423					22,423	22,747
Liabilities	690,285	4,202	1,360,767	187,372	50,579	2,293,205	2,264,532
Current liabilities							
Accounts receivable and accrued interest	208,175					208,175	164,667
Deferred contributions	459,687					459,687	479,391
	667,862					667,862	644,058
Fund Balances							
Investment in capital assets	22,423					22,423	22,747
Restricted		4,202	1,360,767	187,372	50,579	1,602,920	1,597,727
	22,423	4,202	1,360,767	187,372	50,579	1,625,343	1,620,474
	690,285	4,202	1,360,767	187,372	50,579	2,293,205	2,264,532

Statement of Revenue and expenditures year ended December 31, 2005

	GENERAL	DIVISION	PUBLISHING	G DIVISION	RESEARCH	I DIVISION	EDUCATION	N DIVISION	TO	TAL
	2005 \$	2004 \$								
Revenue										
Grants	29,000	49,333	2,500	2,500	25,753	41,000	129,100	61,800	186,353	154,633
Donations	18,898	6,955	1,744	1,123	1,376	2,202	65,119	61,607	87,137	71,887
Membership fees	112,844	102,672							112,844	102,672
Registration fees and other sales		7		7	184,419	164,228	101,940	68,127	286,359	232,369
Subscriptions and publications	110	40	692,065	783,090	80				692,255	783,130
Services, advertising and sales	49,959	12,216	27,305	18,706	4,718	4,743	11,160	3	93,142	35,668
Sundry	1,161	(1,023)	1,144	(1,023)	1,213	(924)	1,144	(1,023)	4,662	(3,993)
	211,972	170,200	724,758	804,403	217,559	211,249	308,463	190,514	1,462,752	1,376,366
Expenditures										
National projects	41,532	46,184					174,874	142,555	216,406	188,739
Speakers and prizes		109	106	208	51,919	65,492	49,820	23,613	101,845	89,422
Production			125,850	126,774	6,015	4,731			131,865	131,505
Promotional material	837	995	922	995	2,016	6,662	6,016	6,643	9,791	15,295
Salaries and benefits	102,337	122,415	286,457	309,269	103,982	126,416	103,743	122,414	596,519	680,514
Boards and Com- mittees	29,126	29,351	70,132	69,734	161	91	2,851	3,395	102,270	102,571
Legal and audit	2,801	3,515	2,800	3,513	2,800	3,513	2,800	3,513	11,201	14,054
General administra-	38,149	40,984	68,829	81,535	121,629	145,621	70,867	39,375	299,474	307,515
Amortization of capital assets	1,601	2,940	1,602	2,939	1,602	2,939	1,602	2,939	6,407	11,757
	216,383	246,493	556,698	594,967	290,124	355,465	412,573	344,447	1,475,778	1,541,372
Excess (deficiency) of revenue over expenditures	(4,411)	(76,293)	168,060	209,436	(72,565)	(144,216)	(104,110)	(153,933)	(13,026)	(165,006)

	DESIG ACTIVITI		ENDOV FUI		MATHEN OLYMPIA		BORI DISTING CAREEI		тот	AL
	2005 \$	2004 \$	2005 \$	2004 \$	2005 \$	2004 \$	2005 \$	2004 \$	2005 \$	2004 \$
Davis										
Revenue Donations			2,798	267	498	253	225	50,000	3.521	50,520
Membership fees			21,000	21,000	430	233	223	30,000	21,000	21,000
Dividend, interest and other income	146	102	47,499	47,777	6,594	5,540	1,782		56,021	53,419
Gain (loss) on disposal of investments	34	(12)	11,223	(5,519)	1,552	(642)	419	50,000	13,228	(6,173) 118,766
Expenditures					0,044	3,131	2,420			110,700
Lifetime membership fees annual transfer			21.164	18,620					21,164	18,620
Projects		288	31,698	54,278					31,698	54,566
Mathematical Olympiad annual transfer					5,000	5,000			5,000	5,000
Services Fees	26	20	8,484	8,940	1,173	1,040	317		10,000	10,000
Promotional material Speakers and prizes			6,483				1,530		6,483 1,530	
	26	308	67,829	81,838	6,173	6,040	1,847		75,875	88,186
Excess (deficiency) of revenue over expenditures	154	(218)	14,691	(18,313)	2,471	(889)	579	50,000	17,895	30,580
Fund balances, beginning of year	4,048	4,266	1,358,778	1,538,752	184,901	185,790	50,000	30,000	1,597,727	1,728,808
Transfer to Operations Fund			(12,702)	(161,661)					(12,702)	(161,661)
Fund balances, end of year	4,202	4,048	1,360,767	1,358,778	187,372	184,901	50,579	50,000	1,602,920	1,597,727

Budgets - Operations Fund Summary

	GRAND DIVISION SUMMARY	2004 Year-end	Budget 2005	Estimates year end	BUDGET Proposal
GENERAL					
Total Revenue		170,200	203,296	202,150	220,788
Total Expenditure		246,493	266,973	271,990	309,962
	NET REVENUE/EXPENDITURE	(76,293)	(63,677)	(69,840)	(89,174)
EDUCATION					
Total Revenue		190,514	317,318	296,865	237,933
Total Expenditure		344,447	451,448	417,356	302,190
	NET REVENUE/EXPENDITURE	(153,933)	(134,130)	(120,490)	(64,257)
RESEARCH Total Revenue		211,249	256,898	269,467	234,110
Total Expenditure		355,465	369,528	340,918	384,169
Total Experiature	NET REVENUE/EXPENDITURE	(144,216)	(112,630)	(71,451)	(150,059)
	HET HEVELOGE, EM ENDITONE	(111,210)	(112,000)	(11,101)	(100,000)
PUBLISHING					
Total Revenue		804,403	841,711	740,562	821,685
Total Expenditure		594,967	611,702	578,686	503,568
	NET REVENUE/EXPENDITURE	209,436	230,009	161,876	318,117
OPERATIONS FU	ND				
Total Revenue		1,376,366	1,619,222	1,509,045	1,514,515
Total Expenditure		1,541,372	1,699,650	1,608,950	1,499,889
	NET REVENUE/EXPENDITURE	(165,006)	(80,429)	(99,905)	14,626

$Budgets\,$ - $\,$ General and Education Divisions

	GENERAL SUMMARY	2004 Year-end	Budget 2005	Estimates year end	BUDGET Proposal
REVENUE					
Administration		14,117	13,568	10,577	62,558
Members		102,672	121,053	114,057	130,230
Projects		50,199	31,000	30,000	28,000
SSC Contract		3212	37,675	47,517	
	TOTAL REVENUE	170,200	203,296	202,150	220,788
EXPENDITURE					
Administration		192,384	185,478	175,900	210,118
Members		1,608	1,620	1,608	59,694
Projects		46,296	47,550	44,308	40,150
SSC Contract		6,205	32,325	50,174	0
	TOTAL EXPENDITURE	246,493	266,973	271,990	309,962
	NET REVENUE/EXPENDITURE	(76,293)	(63,677)	(69,840)	(89,174)

EDUCATION SUMMARY	2004 Year-end	Budget 2005	Estimates year end	BUDGET Proposal
REVENUE				
Administration	5,503	20,018	17,956	12,400
Competitions	103,844	103,250	109,159	123,350
Forum	0	113,000	76,750	0
Math Camps	70,250	72,650	69,600	71,850
Projects	10,917	8,400	23,400	30,333
TOTAL REVENUE	190,514	317,318	296,865	237,933
EXPENDITURE				
Administration	169,513	148,628	145,693	90,241
Competitions	118,761	119,020	114,571	136,643
Forum	0	100,250	66,829	0
Math Camps	45,685	48,200	44,100	57,379
Projects	10,487	35,350	46,163	17,927
TOTAL EXPENDITURE	344,447	451,448	417,356	302,190
NET REVENUE/EXPENDITURE	(153,933)	(134,130)	(120,490)	(64,257)

Budgets - Research and Publications Divisions

	RESEARCH SUMMARY	2004 Year-end	Budget 2005	Estimates year end	BUDGET Proposal
REVENUE					
Administration		(411)	1,568	1,796	1,000
Meetings		211,660	255,330	267,671	233,100
Projects		0	0	0	0
	TOTAL REVENUE	211,249	256,898	269,467	234,110
EXPENDITURE					
Administration		172,546	146,728	144,793	5,743
Meetings		181,655	221,300	194,452	376,726
Projects		1,265	1,500	1,673	1,700
	TOTAL EXPENDITURE	355,465	369,528	340,918	384,169
	NET REVENUE/EXPENDITURE	(144,216)	(112,630)	(71,451)	(150,059)

PUBLISHING SUMMARY		2004 Year-end	Budget 2005	Estimates year end	BUDGET Proposal
REVENUE					
Administration		6,758	12,618	8,516	9,333
Journal		497,217	500,031	460,015	548,444
Bulletin		170,996	176,304	154,214	188,357
Notes		6,558	23,035	9,152	19,096
Electronic Services		64,699	69,881	63,945	0
Crux		43,364	43,193	37,843	45,865
Other Publications		14,800	16,650	6,877	10,590
Projects		0	0	0	0
	TOTAL REVENUE	804,403	841,711	740,562	821,685
EXPENDITURE					
Administration		289,982	276,228	256,866	42,691
Journal		81,985	78,140	74,498	160,652
Bulletin		44,059	46,157	45,585	107,229
Notes		32,549	37,800	32,500	69,183
Electronic Services		105,595	115,958	115,038	0
Crux		38,225	39,970	38,600	90,281
Other Publications		2,364	17,250	15,400	33,331
Projects		208	200	200	200
Т	OTAL EXPENDITURE	594,967	611,702	578,686	503,568
NET REVI	ENUE/EXPENDITURE	209,436	230,009	161,876	318,117

Education Committee Report

Chair: J. Harley Weston (Regina)

- E. Barbeau (Toronto)
- J. Borwein (Dalhousie) MAA Gov of Canada
- L. Charbonneau (UQAM)
- M. Dubiel (SFU) CMESG Representative
- K. Hare (Waterloo) to June 30

- B. Hart (McMaster)
- J. Khoury (Ottawa)
- W. Z. Krawcewicz (Alberta)
- B. Rémillard (HEC) from July 1
- D. Tingley (UNB-Fredericton)

In the Summer Meeting in 2005 the Committee meeting focused on the Adrien Pouliot award and the proposed changes to the education pages on the CMS web site. Between the Summer Meeting and the Winter Meeting the Committee used email to develop a proposed change to the terms of reference for the Adrien Pouliot and CMS Teaching Excellence awards. These changes were approved by the Board at the 2005 CMS Winter Meeting. The Education Committee discussions at its Winter 2005 meeting centered around these changes to the terms of reference, the education sessions at future meetings and the Chief Judge for the 2006 Canada Wide Science Fair.

A summary of the major activities throughout the year include

- The education sessions at the 2005 Summer Meeting in Waterloo were organized by Peter Taylor. The theme was Exploratory Classroom Problems in Calculus and the presenters were Serge D'Alessio and Ian VanderBurgh (Waterloo), Richard Hoshino (Dalhousie), Ved Madan (St. Mary's University College), Peter Taylor (Queens). The education sessions at the 2005 Summer Meeting in Victoria were organized by Malgorzata Dubiel and Veselin Jungic. The theme was Life Beyond Calculus and the presenters were Malgorzata Dubiel (SFU), Dave Lidstone (Langara College), Peter Liljedahl (Faculty of Education, SFU), Susan Milner (UCFV), Susan Oesterle (Douglas College), Frank Ruskey (Victoria) and Tara Stuckless (Regina).
- The 2005 CMS Teaching Award was presented to Dr. Philip Loewen at the Summer 2005 Meeting where he presented a luncheon address.

- The 2005 Adrien Pouliot Award was presented to Dr. Katherine Heinrich at the Winter 2005 Meeting where she presented an address at the Participant's Social on Saturday evening.
- Following the advice of its subcommittee on provincial competitions the Committee made 6 awards for a total of \$3,500.
 The awards were to Alberta, Manitoba, Newfoundland, Ontario, P.E.I. and Quebec.
- The CMS Chief Judge for the 2005 Canada wide Science Fair was Veselin Jungic (SFU). The winners and their projects were profiled in the December 2005 issue of the CMS Notes. The winners of the CMS prizes were
- Mate Bezdek from Calgary won the Junior Award of \$250 for his project titled "Planets Guarded by Satellites."
- Daniel Bezdek from Calgary won the Intermediate Award of \$500 for his project titled "Kepler's Quest."
- Peter Forsyth from Waterloo-Wellington won the Junior award of \$250 for his project titled "The Attraction of Repulsion."
- The Education Committee Chair was one of the referees for the 2005 Math in Moscow competitions. The winners were Logan Hoehn (Saskatchewan), Daniel Fiorilli (Montréal) and Nithum Thain (Queens).
- The Education Committee Chair was one of the referees for the 2005 CMS Teaching Excellence award. The award will be presented at the 2006 CMS Summer Meeting in Calgary.

Electronic Services Committee Report

Chair: David L. Rodgers (Michigan)

- J. Brown (Dalhousie) from July 1
- J. Carette (McMaster)
- S. Chen (Alberta) to June 30
- G. Pechske (Alberta)

- J. Rostand (Laval)
- D. Wehlau (RMC)
- H. Wolkowicz (Waterloo)

The Committee thanked Eric Woolgar (Alberta) and Jacques Carette (McMaster) for their service and welcomed Jason Brown (Dalhousie) and David Pike (Memorial). Jacques Carette subsequently accepted a two-year appointment to the Committee as a Consultant with industrial experience.

The Electronic Services Committee (ESC) provides policy oversight for services provided by the Web Services Office (Ottawa) and Publications Office (Manitoba):

Web Services Office

- Operations are guided by a resource allocation scheme for prioritizing and tracking work requests that is working well.
 Overall statistics for 2005 indicate that allocation targets have been essentially met and the on-going review/tracking process has been successful. A better mechanism for tracking and dealing with small tasks has been implemented. Backlog has been reduced.
- Written agreement with Google to crawl the CMS website under terms and conditions that protect CMS interests was reached.
- A Grad/Undergrad e-mail list has been developed working with the Student Committee.
- Office services requested by the Statistical Society of Canada under an existing contractual arrangement have been integrated into the CMS workflow and go smoothly.
- A careful, preliminary investigation and analysis of integrated accounting systems that can better and more reliably support Executive Office requirements has been conducted.

Publications Office

- Production of CMS publications are being produced on time with few problems.
- Various approaches to digitizing the backfile (approximately 75,000 pages) for CMS journals were discussed with expectation that some *real* progress can be made by the Summer 2006 (Calgary) Meeting.

Both Offices are involved in a re-design effort for the CMS website that will produce visible results for the Summer 2006 (Calgary) Meeting. An overall design has been endorsed. A prototype for dynamic generation of CMB and CJM web pages was demonstrated to the Committee at the Winter 2005 (Victoria) Meeting. Overall agreement was reached on a model for providing e-commerce services.

In addition:

- Data projectors for use at CMS meetings were evaluated and 2 have been purchased for further evaluation.
- Automated e-mails to 515 members produced over 200 membership renewals for 2006.
- A careful, preliminary investigation and analysis of integrated accounting systems that can better and more reliably support Executive Office requirements has been conducted.
- · A new KaBoL linkmaster was identified.

The Committee joined Graham Wright in complimenting the work of both the Ottawa and Winnipeg offices, with special mention of their ability and willingness to juggle multiple tasks.

Endowment Grants Committee Report

Chair: Karl Dilcher (Dalhousie)

- I. Chen (SFU)
- B. Hodgson (Laval)

- D. Pike (Memorial)
- G. Sinnamon (Western)

The main task of the Endowment Grants Committee is to adjudicate proposals for projects that are requesting financial support from the CMS Endowment Grants Competition. Projects which are funded must contribute to the goals of the CMS and to the broader good of the mathematical community.

The committee was allocated \$10,000 for the 2005 competition. Nine applications were received. Four of these were funded and the total allocated amount was awarded. All applicants have been notified by the CMS Executive Office in Ottawa.

The successful applications were as follows:

- A high-school mathematics contest in Thunder Bay the Endowment Grant will allow for an expansion to additional schools in Northwestern Ontario.
- Financing a regular mathematics column in the French language science magazine "Découvrir".
- Contributing to the costs of a championship of mathematical games which will bring over 100 high school students to the Laval University campus.
- Following an international meeting of francophone mathematicians, a one-day meeting will bring together university mathematicians and mathematics teachers at all levels, an endowment grant will provide partial funding.

Endowment Grants of up to three years duration can be awarded, and several of the applications were for two- or three-year grants. However, given the limited funds available for this competition, only one-year grants were awarded this time. More details on the successful applications can be found on the CMS website: www.cms.math.ca/Grants/EGC/ Reports on projects funded in the past can also be found at this site.

Although the stock market had somewhat recovered, the overall financial situation of the CMS required a reduced competition for 2005. The CMS Executive decided at its meeting in October, 2005, that a somewhat increased minimum amount of \$15,000 be allocated from the Endowment Fund for the 2006 Endowment Grants Competition.

Finance Committee Report

Chair: Akbar Rhemtulla (Alberta)

T. Appelt (Structured Analytics)

D. Bates (ManuLife Financial)M. Bremner (Saskatchewan)

H.E.A. Campbell (Memorial)

J. Mingo (Queen's)

C. Rousseau (Montréal) to June 30

T. Salisbury (York) from July 1

A. Sherk (Toronto)

G. P. Wright (Ottawa)

The Finance Committee advises the Board of Directors of CMS on general financial policies and oversees, in accordance with the policies determined by the Board, the financial activities of the Society including the annual budget, the Restricted Investment Fund, the Endowment Fund, the Mathematical Olympiad Fund and Designated Activities Fund. The Committee includes among its members the Treasurer, the Executive Director, the President and the Past President or the President Elect of the CMS. The committee meets twice a year, in April and October, to discuss the budget and make recommendations on financial matters.

As of November 2004, the total amount in the various funds was approximately \$1,618,000 Canadian. These are invested in various indexed funds managed by Toronto Dominion Quantitative Capital. The mix of the fund weightings is reconsidered from time to time. The present allocations are approximately 50% in global equity funds, 10% in Canadian Equity funds and 40% in Canadian Bonds, a quarter of which is in real return bonds.

The Society is in the process of establishing a true Endowment Fund using a portion of the money presently in the Restricted Investment Fund. The Society is presently on a significant drive to raise money for the Endowment Fund.

Due to several reasons including the fall in revenues from the journal subscription numbers and low interest rate there is less money available for some of the activities funded by proceeds of the Restricted Investment Fund. In particular, the amount allocated for the Endowment Grants Competition has been kept at a reduced level for the second year , and we had an operating deficit.

International Affairs Committee Report

Chair: Richard Kane (Western)

- Y. Bahturin (Memorial)
- N. Kamran (McGill)
- F. Gourdeau (Laval) CMESG Representative
- E. Marchand (UNB) SSC Representative

- E. Perkins (UBC)
- S. Shen (Alberta) CAIMS Representative
- C. Stewart (Waterloo)

The IAC is the liaison committee which serves as the voice of Canadian mathematics within the International Mathematical Union (IMU). It is officially a committee of the National Research Council (NRC). The NRC provides most of the funding used to support the participation of Canadian mathematics within the IMU. All of the following items were arranged during 2005.

- The agreement between the CMS and the NRC with respect to the IAC was renewed for a five year period effective until 2010. NRC will continue to pay the annual Canadian membership fee to the IMU.
- 2. The IAC has arranged for NRC to submit the nomination of Nassif Ghoussoub for membership on the IMU Executive Committee. The decision about the makeup of the IMU Executive Committee will be made at the IMU General Assembly which will take place in Santiago de

- Compostela, Spain just preceding the International Congress of Mathematicians to be held in Madrid in August 2006.
- 3. The Canadian delegation to the IMU General Assembly has also been arranged. The delegation will consist of: Jon Borwein (Dalhousie), Donald Dawson (Carleton/McGill), Nassif Ghoussoub (UBC), Richard Kane (Western Ontario), and Christiane Rousseau (Montréal), Jacques Hurtubise (McGill) will serve as the alternative delegate.

Mathematical Competitions Committee Report

Chair: George Bluman (UBC)

E. Barbeau (Toronto)

F. Cass (UWO) to August 31

Y.Chen (Lakehead) to August 31

P. Crippin (Waterloo) to August 31

R. Dawson (Saint Mary's)

K. Kopotun (Manitoba)

B. Rémillard (HEC) from July 1

B. Sands (Calgary)

B. Shawyer (Memorial)

J. Thompson (UNB-Fredericton) to June 30

D. Tingley (UNB-Fredericton)

I. VanderBurgh (Waterloo)

T. Visentin (Winnipeg) to August 31

G. P. Wright (Ottawa)

Canadian Mathematical Olympiad (CMO) Sub-Committee

Chair: E. Barbeau (Toronto)

from September 1

Chair T. Visentin (Winnipeg)

to August 31

J. Babb (Winnipeg) to August 31

R. Barrington Leigh

from September 1

M. Choi (Toronto)

from September 1

R. Craigen (Manitoba) to August 31

J. Currie (Winnipeg) to August 31

R. Dawson (St. Mary's)

to August 31

J.C. Fisher (Regina)

R. Gaudet (Coll. Univ. Saint-Boniface)

to August 31

R. Hoshino (Dalhousie)

K. Kopotun (Manitoba)

to August 31

R. Mong (Toronto)

from September 1

O. Oellermann (Winnipeg)

to August 31

I. Poliakov (York)

from September 1

F. Recio (Toronto)

N. Sato (Art of Problem Solving)

A. Stokke (Winnipeg) to August 31

R. Stokke (Winnipeg) to August 31

D. Tingley (UNB Fred.)

to August 31

J. Tsimerman (Toronto)

from September 1

E. Wang (Wilfred Laurier)

from September 1

International Mathematical Olympiad (IMO) Sub-Committee

Chair: B. Sands (Calgary)

E. Barbeau (Toronto)

G. Bluman (UBC)

R. Morewood (Burnaby South Secondary School)

R. Nowakowski (Dalhousie) to August 31

F. Recio (Toronto)

C. Small (Waterloo)

L. Yen (Capilano College)

Canadian Open Mathematics Challenge (COMC) Sub-Committee

Chair: I.VanderBurgh (Waterloo) from September 1

Chair: P. Crippin (Waterloo)

to August 31

G. Bluman (UBC)

M. Eden (Preston High School)

Mathematical Olympiads Correspondence Program

E. Barbeau (Toronto)

Introduction

The Mathematical Competitions Committee (MCC) is responsible for overseeing activities associated with the Society's involvement in mathematics contests. Two contests, the Canadian Open Mathematics Challenge (COMC) and the Canadian Mathematical Olympiad (CMO), are sponsored and run by the Society. The MCC is also responsible for Canada's participation in the Asian Pacific Mathematics Olympiad (APMO) and the International Mathematical Olympiad (IMO). Other activities of the MCC include the Mathematical Olympiad Correspondence Programme (Olymon) and the Esso-CMS National Math Camp.

Most of the work of the MCC is done by its four subcommittees (COMC Committee, CMO Committee, IMO Committee, and Correspondence Coordinator). Further information, including press releases, on most of the topics in this report can be found through the CMS Competitions web page www.cms.math.ca/Competitions/ and at www.cms.math.ca/MediaReleases/.

The Canadian Mathematical Olympiad:

The 37th Canadian Mathematical Olympiad (CMO) was written on March 30th, 2005. A total of 75 competitors from 49 schools were invited to write the 2005 CMO.

The top winners in the 37th Canadian Mathematical Olympiad were:

FIRST PRIZE and the Sun Life Financial Cup: Peng Shi, Sir John A. MacDonald C.I., Scarborough, ON. SECOND

PRIZE: Richard Peng, Vaughan Road Academy, Toronto, ON. THIRD PRIZE: Yufei Zhao, Don Mills C.I., Don Mills, ON. HONORABLE MENTION: Boris Braverman, Sir Winston Churchill H.S., Calgary, AB; Elyot Grant, Cameron Heights C.I., Kitchener, ON; Zheng Guo, Western Canada H.S., Calgary, AB; Oleg Ivrii, Don Mills C.I., Don Mills, ON; Lin Fei, Don Mills C.I., Don Mills, ON; David Rhee, McNally H.S., Edmonton, AB; Shaun White, Vincent Massey S.S., Windsor, ON. A detailed report on the 2005 CMO, including the contest paper, solutions to the problems, and graders' reports is available at: www.cms.math.ca/Competitions/CMO

The Asian Pacific Mathematics Olympiad:

The 17th Asian Pacific Mathematics Olympiad (APMO) was written on March 14th, 2005. A total of 41 Canadian students wrote the exam. The award winners were: Peng Shi (Gold); Richard Peng and Elyot Grant (Silver); Kent Huynh, Boris Braverman, Oleg Ivrii, and David Rhee (Bronze); Yufei Zhao, Francis Chung, and William Fu (Honourable Mention). We are grateful to Bill Sands, Naoki Sato and Daryl Tingley for their proposed problems for APMO 2005. Further details regarding the 2005 APMO are available at www.cms.math.ca/Competitions/APMO/.

The International Mathematical Olympiad:

The 46th International Mathematical Olympiad (IMO) took place in Mérida, Mexico from July 8-19, 2005. Competing against students from 90 other countries, the young Canadian Team of six students (five have at least one more year of eligibility) did

Mathematical Competitions Committee Report - continued

very well, winning one Gold Medal, two Silver Medals, and two Bronze Medals. The six students who competed for Canada were: Lin Fei, Don Mills C.I., Toronto, ON; Elyot Grant, Cameron Heights C.I., Kitchener, ON; Richard Peng, Vaughan Road Academy, Toronto, ON; David Rhee, McNally H.S., Edmonton, AB; Peng Shi, Sir John A. MacDonald C.I., Scarborough, ON; Yufei Zhao, Don Mills C.I., Toronto, ON.

The team was accompanied by the Team Leader, Dr. Felix Recio (University of Toronto), the Deputy Team Leader, Dr. Dorette Pronk (Dalhousie University), and the Deputy Leader Observer, Mr. Adrian Tang (University of Calgary).

We are grateful to Daniel Brown, Naoki Sato, and Jacob Tsimerman for their proposed problems for IMO 2005.

For more information regarding the 2005 IMO, see the very interesting articles (including the effects of Hurricane Emily) in the December 2005 issue of CMS Notes and

www.cms.math.ca/MediaReleases/2005/imores.html. Further details about the IMO are available at: www.cms.math.ca/Competitions/IMO/.

IMO Training Seminars:

Two training camps are held each year to prepare students for the annual IMO. The Winter Training Seminar (held at York University, January 4-9, 2005) is used to begin the training for the IMO and to let the team leaders meet those students who have a good chance of making the IMO team. The Summer IMO Training Seminar (held at BIRS and at the University of Calgary, June 25-July 10, 2005) was used for intensive training of the actual IMO team. We are very grateful to BIRS in association with PIMS for giving us almost two weeks at BIRS at no charge to CMS (hopefully this will continue in future years)!!

Mathematical Olympiads Correspondence Programme:

This programme (Olymon) is intended for Canadian (or permanent resident) high school students with exceptional mathematical ability who are interested in mathematical problem solving at a high level or have ambitions to compete in Mathematical Olympiads. This year there were ten problem sets: eight were constructed and marked by Edward Barbeau (University of Toronto), one by Valeria Pandelieva of Ottawa, and one by Lily Yen of Burnaby, BC. The number of respondents for each set was normally in the 10-15 range. All the Olymon problems with their solutions are posted at www.cms.math.ca/Competions/MOCP/ and also on the website of Ed Barbeau (www.math.utoronto.ca/barbeau). We hope to increase the participation rate and also recruit someone to supervise a French version of the correspondence programme. Dr. Edward Barbeau has been the Coordinator of the MOCP for many years.

Math Camps

The National Math Camp is designed primarily for younger Canadian students with at least two years remaining in high school and with the potential to compete at the Mathematical Olympiad level. Participation in the camp is by invitation only. It is intended for students in Grades 8-10. The camp was held at John Abbott College in Montreal, July 3-9, 2005 and hosted 17 students: nine from Ontario, five from BC, two from Saskatchewan, and one from Alberta. Five students from Ouebec were invited but unfortunately none attended. Normally, the initial selection is made from the results in the Canadian Open Mathematics Challenge and the remaining students are selected based on their results in the Grade 10 Galois Contest, organized by the University of Waterloo's Centre for Education in Mathematics and Computing (CEMC). Other contest information and recommendations from Regional Math Camp directors are also considered. The 2005 National Math Camp was organized and run by Daniel Gatien (John Abbott College) and Matthieu Dufour (Université du Québec à Montreal) with sessions led by Richard Hoshino, Keigo Kawaji and Anne Fearnley. Overall, the students rated the 2005 camp very favourably and they preferred the geometry sessions well above all others. Further details can be obtained at: www.cms.math.ca/MathCamps/.

The Canadian Open Mathematics Challenge

November 2005 marked the tenth writing of the COMC. It is a collaborative activity between the CMS and CEMC. This Contest 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. And 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.

The 2005 edition of the COMC had a record number of over 6,300 participants. The paper had an average mark of 41/80 thus giving some chance of success to every student who wrote the paper, while continuing to provide a challenge for the very best problem solvers in the country. The top five winners were: Farzin Barekat, Sutherland S.S., North Vancouver, BC; Boris Braverman, Sir Winston Churchill H.S., Calgary, AB; David Rhee, McNally H.S., Edmonton, AB; Peng Shi, Sir John A. MacDonald C.I., Scarborough, ON; Allen Zhang, St. George's School, Vancouver, BC. Thanks go to the hard-working Problems Committee who annually ensure that the paper meets its varying goals. Further details are available at: www.cms.math.ca/Competitions/COMC/ or www.cemc.uwaterloo.ca/english/contests/open.shtml.

It is apparent that the Mathematical Competitions Committee (particularly its subcommittees) is very active. I would like to thank all members for their enthusiasm and hard work in making everything run so smoothly. No small measure of thanks is due to the staff at the CMS Executive Office and, in particular to the Executive Director Graham Wright, for their dedication.

Nominating Committee Report

Chair: Line Baribeau (Laval)

H.E.A. Campbell (Memorial)

J. Hurtubise (McGill)

L. Jeffrey (Toronto)

C. Laflamme (Calgary)

C. Rousseau (Montréal) to June 30

K. Taylor (Dalhousie)

T. Salisbury (York) from July 1

The first task of the year for the Nominating committee was to find candidates to the Board of Directors for the elections that were held in the Spring. Then the committee had to find members to fill vacancies in the Advancement of Mathematics, Education, Endowment Grants, Electronic Services, Finance, International Affairs, Publications, Research, and Women in Math Committees. New chairs were also nominated for the Finance, International Affairs and Research Committees. As of December 2005, the position of Chair of the Women in Math Committee was still vacant. In looking for committee members, the Nominating Committee tries to keep a regional and gender balance, as well as a good range of mathematical interests. In particular, it is great to recruit people from outside of academia, as we did this year for one committee position.

Au début de l'année, le comité a eu la tâche de trouver les candidats au Conseil d'administration en vue des elections du printemps. Puis, il a fallu combler plusieurs postes dans les comités suivants: avancement des mathématiques, éducation, attribution des bourses du fonds de dotation, services électroniques, finances, affaires internationales, publications, recherche et femmes en mathématiques. Nous avons également trouvé de nouveaux présidents pour les comités des affaires internationales, des finances et de la recherche. Au 31 décembre, le poste de président(e) du comité des femmes en mathématiques restait à combler. Rappelons que dans la constitution des comités, nous essayons de maintenir un équilibre géographique, une répartition homes/femmes équitable, ainsi qu'un bon éventail d'intérêts mathématiques. Nous sommes toujours heureux également de recruter en dehors du monde universitaire, comme fut le cas pour un des postes comblés cette année.

Publications Committee Report

Chair: Juris Steprans (York)

- N. Bergeron (UQAM)
- D. Farenick (Regina)
- R. Murty (Queen's) from July1

- R. Rosebrugh (Mount Allison)
- C. Rousseau (Montréal) to June 30
- C. Sulem (Toronto)

The Publications Committee oversees many of the activities of the CMS that have a bearing on the society's publications. Editorial board appointments are among the committee's chief concerns.

The editorial duties of the CMB changed hands during this year, although the appointment was made already in 2004. The editors on the CJM will be stepping down in 2006 and the search for their replacement began, but did not conclude, in 2005. However, 2005 did see changes in the list of associate editors. The terms of Freydoon Shahidi and George Elliott ended in 2005. It was decided at the Waterloo meeting that George Elliott be re-appointed and that the editorial board be expanded with the appointments of Henry Kim of the University of Toronto and Alan Dow of the University of North Carolina at Charlotte.

The terms of the editors of the CMS Notes also expired in 2005, but R. Dawson and S. Swaminathan of Dalhousie University have agreed to continue their work in this position.

Peter Fillmore wil continue as the editor of the book review section for the CMS Notes.

In 2005 the CMS entered into an agreement with AK Peters to publish a new book series. The Waterloo meeting of the publications Committee approved the appointment of the following initial editorial board for the CMS/AK Peters series: James Arthur, Ivar Ekeland, Arvind Gupta, Barbara Keyfitz and Francois Lalonde. The CMS/Springer series continues to receive a healthy number of manuscripts for consideration and sales are good. The editor of this series for many years, Jonathan Borwein, has decided to step down and he will be replaced by his colleague

at Dalhousie University, Keith Taylor.

The CMS also publishes a series of booklets known as ATOM (A Taste of Mathematics) that are designed as enrichment materials for high school students with an interest in mathematics. The editorship of this series was assumed by Bruce Shawyer of Memorial in 2005.

There were also some changes in the editorial board the CMS problems journal CRUX with Mayhem. Jeff Hooper of Acadia University will replace John Grant McLoughlin as Associate Mayhem Editor while Maria Torres of the University of Regina will take over as Problems Editor from Rick Brewster.

According the the established tradition of alternating between the Bulletin and the Journal, the G. de B. Robinson in 2005 was offered for the best article (or series of articles) in the CMB. The prize was awarded to Yu-Ru Liu for her two papers: *A Generalization of the Turan theorem*, CMB (2004), Vol. 47, No. 4 and *A Generalization of the Erdos-Kac theorem and its applications*, CMB (2004), Vol. 47, No. 4.

Several issues were considered by the committee in 2005 but not yet resolved. Among these the new pricing and bundling policy for the CMB and CMJ and the possible move to electronic submission of articles are especially worthy of note.

Research Committee Report

Chair: Finnur Larusson (Western)

S. Boyer (UOAM) to June 30

R. Buchweitz (Toronto)

A. Granville (Montréal)

the Doctoral Prize.

E. Perkins (UBC) from July 1

The two main tasks of the Research Committee are overseeing the organization of the scientific programmes of the summer and winter meetings, and selecting the recipients of the Jeffery-Williams, Krieger-Nelson, and Coxeter-James Prizes. A subcommittee of the Research Committee selects the recipient of

At its meeting in December 2005, the Research Committee chose Nassif Ghoussoub (UBC) as the 2007 Jeffery-Williams Prize Lecturer, Pauline van den Driessche (Victoria) as the 2007 Krieger-Nelson Prize Lecturer, and Jim Geelen (Waterloo) as the 2006 Coxeter-James Prize Lecturer. In March 2005, the Doctoral Prize Selection Committee chose Vasilisa Shramchenko (Concordia) as the recipient of the 2005 Doctoral Prize.

The 2005 Summer Meeting was held at the University of Waterloo on June 4-6, with the participation of the Canadian Society for the History and Philosophy of Mathematics. The meeting set a record both in terms of the number of delegates (540) and the number of sessions (23). The Meeting Director was Alexandru Nica and the Local Arrangements Chair was Frank Zorzitto.

The plenary speakers were:

Len Berggren, Simon Fraser, CSHPM plenary talk

Keith Devlin, Stanford

Dan Freed, Texas at Austin

Robert McCann, Toronto

Andrei Okounkov, Princeton

Gilles Pisier, Paris 6 and Texas A&M

Ken Ribet, Berkeley

The Jeffery-Williams Prize Lecture was given jointly by Edward Bierstone and Pierre Milman (Toronto), and the Krieger-Nelson Prize Lecture was given by Barbara Lee Keyfitz (Fields and Houston).

The following symposia (listed with their organizers) took place at the meeting:

Automatic Sequences and Related Topics

Jean-Paul Allouche (Orsay), Jeffrey Shallit (Waterloo)

Combinatorics and Geometry

Ian Goulden (Waterloo)

Complex Variables

Thomas Bloom (Toronto), Paul Gauthier (Montréal)

B. Reed (McGill)

N. Tomczak-Jaegermann (Alberta)

J. Wu (York)

Discrete and Computational Geometry

Leroy J. Dickey (Waterloo), Asia Ivic Weiss (York)

Dynamical Systems

Sue Ann Campbell (Waterloo), Yuming Chen (Wilfrid Laurier), Huaiping Zhu (York)

Exploratory Classroom Problems in Calculus

Peter Taylor (Queen's)

Functional Equations and Their Applications

Janos Aczel, Che-Tat Ng (Waterloo)

General Topology and Its Applications

E.D. Tymchatyn (Saskatoon), A. Karassev, M. Tuncali, V. Valov (Nipissing)

Geometric Topology

Hans Boden (McMaster), Doug Park,

Mainak Poddar (Waterloo)

History and Philosophy of Mathematics (CSHPM Session)

Duncan Melville (St. Lawrence)

History of Mathematics from Medieval Islam to Renaissance Europe (CSHPM Session)

Rob Bradley (Adelphi),

Glen van Brummelen (Bennington College)

Invariant Theory and Differential Geometry

Ray MacLenaghan (Waterloo),

Roman Smirnov (Dalhousie)

L-Functions and Algebraic Curves

Yu-Ru Liu, David McKinnon, Michael Rubinstein (Waterloo)

Mathematical Aspects of Quantum Information

Daniel Gottesman (Perimeter), Achim Kempf (Waterloo),

David Kribs (Guelph), Mike Mosca (Waterloo)

Mathematics from Ancient to Modern Times

Richard O'Lander, Ronald Sklar (St. John's)

Mathematics of Actuarial Finance

Tom Salisbury (York, Fields)

Mathematics of Computer Algebra and Analysis

Keith Geddes, Mark Giesbrecht, George Labahn,

Arne Storjohann (Waterloo)

Nonlinear Partial Differential Equations

Robert McCann (Toronto), Walter Craig (McMaster), Catherine Sulem (Toronto)

Research Committee Report - continued

Operator Algebras, Operator Spaces and Harmonic Analysis

Ken Davidson, Brian Forrest (Waterloo)

Random Graphs and Their Applications

Anthony Bonato (Wilfrid Laurier), Penny Haxell, Nicholas Wormald (Waterloo)

Representation Theory

Wentang Kuo (Waterloo)

String Theory and Integrable Systems

Lisa Jeffrey (Toronto), Boris Khesin (Toronto), Rob Myers (Perimeter)

Contributed Papers Session

Peter Hoffman (Waterloo)

The 2005 winter meeting was hosted by the University of Victoria and held at the Victoria Conference Centre on December 10-12. There were 322 registered delegates and 15 sessions. The Meeting Director was Ahmed Sourour and the Local Arrangements Chair was David Leeming.

The plenary speakers were:

Robert Guralnick, Southern California Uffe Haagerup, South Denmark Bryna Kra, Northwestern Andrew Majda, Courant Oded Schramm, Microsoft

The Coxeter-James Prize Lecture was given by Robert McCann (Toronto) and the Doctoral Prize Lecture was given by Vasilisa Shramchenko (Max Planck, Bonn). The Adrien Pouliot Prize lecture was given by Katherine Heinrich (SFU).

The following symposia (listed with their organizers) took place at the meeting:

Applied Partial Differential Equations

Anne Bourlioux (Montréal), Reinhard Illner, Boualem Khouider (Victoria)

Combinatorics

Peter Dukes, Frank Ruskey (Victoria)

Discrete and Convex Geometry

Karoly Bezdek (Calgary), Jozsef Solymosi (UBC)

Ergodic Theory

Christopher Bose (Victoria), Andres del Junco (Toronto)

Graph Theory

Jing Huang, Kieka Mynhardt, Wendy Myrvold (Victoria)

History of Mathematics

Len Berggren (SFU)

Life Beyond Calculus

Malgorzata Dubiel, Veselin Jungic (SFU)

Mathematics Inspired by Biological Models

Fred Brauer (UBC), Pauline van den Driessche (Victoria)

Matrix Analysis

Man-Duen Choi (Toronto), Douglas Farenick (Regina)

Nonlinear Analysis

Martial Agueh (Victoria), Ivar Ekeland (PIMS), Robert McCann (Toronto)

Operator Algebras

Marcelo Laca, John Phillips (Victoria)

Probability

Martin Barlow, Edwin Perkins (UBC)

Topology

Dale Rolfsen (UBC)

Variational Analysis and Optimization

Jiming Peng (MacMaster), Jane Ye (Victoria)

Contributed Papers Session

C. Robert Miers (Victoria)

Student Committee Report

Co-Chairs: Joy Abramson (York) and Antoine Khalil (Concordia)

- M. E. Barnes (SFU)
- E. Blom (Queen's) to June 30
- L. Chindelvitch (McGill)
- A. Dawes (UBC) to June 30
- S. Gregov (McMaster)
- D. Kipling (Saskatchewan) to June 30
- D. Leung (SFU)

- T. Nieuwpoort (Acadia)
- D. Pollock (Victoria)
- B. Reitman (Simon Fraser) to June 30
- N. Thain (Queen's)
- R. Woodrow (Calgary)
- G. P. Wright (Ottawa)

2005 was another productive and exciting year for the CMS Student Committee (often referred to as Stude). Along with a faculty supervisor, Stude is comprised of ten students, both undergraduate and graduate, whose mission is to foster the development of a vibrant and highly interactive community of Canadian post-secondary mathematics students that leads to the continued creation of important long-term bonds between individuals. More information on the goals of Stude and its membership can be found on the Stude web site: www.cms.math.ca/Students.

Change of Membership

We thank all our past members, in particular Erica Blom, Adriana Dawes, Duana Kipling and Boris Reitman who have recently left the committee. We welcome our new members, Marcus Emmanuel Barnes, webmaster, Leonid Chindelvitch, CUMC representative and Desmond Leung, representative for Western Canada. We currently have nominations open to fill three vacancies.

Operations Manual for the Student Committee

We thank former members Duana Kipling and Susan Cooper for completing the first version of an operations manual for Stude, a projected initiated by Dan Piché. The operations manual describes the ongoing Stude activities. It is continually updated, and has been very helpful with easing the transition of membership. Antoine Khalil, Stude co-Chair, is currently heading this project.

Student Newsletter

One way in which Stude promotes the interaction between Canadian post-secondary mathematics students is through our semiannual newsletter, "The Student Mathematical Communicator", which is distributed to all mathematics departments in Canada. The newsletter communicates information of interest to students about Stude and the CMS. Stude usually publishes and distributes two student newsletters a year, one in each of the fall and winter semesters. In 2004 and 2005, one issue was distributed in print. We plan to return to distributing two print newsletters in 2006 and are optimistic that we will be able to increase the size of the newsletter. Dan Pollock is the current editor.

Graduate Student Events

As in past years, Stude organized a social event for graduate students at each of the CMS meetings in 2005. Both events, at the Victoria and Waterloo meetings, were our largest and most successful student socials ever. Stude plans to continue organizing these events at which Stude and the CMS are promoted to students attending the meeting as well as to local mathematics students. The next graduate student event will be held in Calgary during the CMS 2006 Summer Meeting. Thanks to Dan Pollock for arranging the venue for the social events, Sandra Gregov for designing the posters, and Gertrud Jeewanjee at the CMS for all her help in publicizing the event.

Regional Conferences

Each year Stude has a goal of financially supporting four student activities, one in each of the four regions across Canada. In 2005, for the first time, we were able to support four events: the AARMS Summer School in Halifax, the Operator Algebras Summer School in Toronto, the Graduate Student Social at the International Linear Algebra Society Conference in Regina, and the PIMS Summer Workshop in Mathematical Biology. We plan to continue to fund four events in 2006. Thanks to Adriana Dawes for her persistence and energy in tracking down all four conferences this year.

Student Web Site

Our new webmaster, Marcus Emmanuel Barnes, is now halfway through his first year on the committee. He has spent a significant amount of time behind the scenes, cleaning up the technical aspects of our webpage, and is now working on increasing the content and keeping it up-to-date. He plans to add a French translation soon. Nithum Thain has continued to create and post problem sets. We encourage you to check out this and all our other new content at www.cms.math.ca/Students. Thanks to Boris Reitman for setting up our original webpage, and for his years of work on the Stude.

Canadian Undergraduate Mathematics Conference

The CUMC 2005, the 12th annual Canadian Undergraduate Mathematics Conference, was held at Queen's University from July 13 to 17. The CUMC 2005 president, Erica Blom, did a fantastic job, along with her committee. The conference was a

Student Committee Report - continued

huge success, and was by far the largest CUMC to date. 142 participants from all across Canada gave a total of 85 student talks. Stude, on behalf of the CMS, once again gave \$1,000 towards the conference. A CUMC operations manual, originally developed by Dan Piché, Benoit Charbonneau, and the CUMC 2002 Committee, is currently being updated by Stude member Sandra Gregov. This manual has proved very helpful to aid in the continuity of the CUMC. We are now looking forward to CUMC 2006, which is being organized by Leonid Chindelvitch and his team, July 5 to July 9.

The CUMC will be returning to McGill University in Montreal, home to the very first CUMC back in 1994. For more details, see www.cumc.math.ca.

Student Listservs

Two new email listservs have been created to send announcements to mathematics students across the country: grad-students@cms.math.ca and ugrad-students@cms.math.ca. In total, over 400 students are subscribed to the two lists. These listservs were created in response to numerous comments from students that they were not hearing about various mathematics events such as summer schools, conferences and scholarships. We encourage members of the mathematics community to make use of them to ensure that announcements reach as many Canadian mathematics students as possible. Thanks to Alan Kelm at the CMS for help in getting this project underway!

Student CMS Memberships

We have been working to make Student memberships in the CMS more attractive. Klaus Peters has very generously donated 50 copies of the book "The Education of a Mathematician" to be given to the next 50 students who join the CMS. In addition, the CMS now provides a subscription to Crux Mathematicorum free to all student members. With these two new initiatives, it has become very easy to convince students to join the CMS. We are now working with the CMS office to create a "Why Join the CMS?" pamphlet customized to students. In addition, we are working to advertise the CMS memberships to students more widely, using our newsletter, listservs, and the CUMC. Thanks to Liliane Sousa at the CMS for all her help with this project.

Studc Poster

Sandra Gregov has created an attractive new Stude poster to help publicize the committee better. The poster will be available on our website and in print once the French translation is complete.

Women in Mathematics Committee Report

Chair: Judith J. McDonald (Washington State University)

J. Brown (Dalhousie) from July 1

M. Dubiel (SFU)

K. Hare (Waterloo) to June 30

R. Kuske (UBC) M. Sajna (Ottawa)

P. Zhou (St. Francis Xavier)

The Committee on Women in Mathematics is charged with monitoring the status of women within the Canadian mathematical community, recommending and initiating actions that will help to ensure equitable treatment of women in this community, and with encouraging the participation of women in mathematics at all levels.

The Committee put together a survey to be sent to mathematics departments in universities across Canada. The survey was sent out to the chairs of mathematics departments July of 2005. The purpose of the survey is to get a general picture of the demographic profile of mathematics departments in Canada. Unfortunately we have not received data from enough universities to finish the survey.

The Committee is looking at ways to revise and update the Directory of Canadian Women in the Mathematical Sciences: a collection of web pages of Canadian women who are actively involved in research or studies in mathematics, or any other aspects of the mathematical sciences.

In June of 2003, the CMS Committee on Women in Mathematics, together with PIMS, hosted the first Connecting Women in Mathematics Across Canada conference. We put on a similar meeting during July of 2005 at BIRs, with support from a CMS endowment grant and PIMS. With this money, the Committee was able to provide graduate students with partial funding for travel. Each student gave a presentation on their work, and there were two panels and two plenary speakers.

At the 2005 CMS Winter Meeting, the CMS Women in Mathematics Committee together with the Association for Women in Mathematics, hosted a lunch on mentoring graduate students and new faculty.

As we move into 2006, the Committee is working on updating its terms of reference, planning a workshop at BIRS on Women in Mathematics, and finding a way to complete the survey initiated last summer.

Editorial Boards

Canadian Journal of Mathematics (CJM) Canadian Mathematical Bulletin (CMB)

H. Darmon (McGill) Editor-in-Chief CJM
N. Kamran (McGill) Editor-in-Chief CJM
J. Lewis (Alberta) Editor-in-Chief CMB
A. Pianzola (Alberta) Editor-in-Chief CMB
N. Yui (Queen's) Editor-in-Chief CMB

S. Boyer (UQAM)

W. Craig (McMaster)

L. Devroye (McGill)

G. Elliott (Toronto)

A. Geramita (Queen's)

P. Guan (McGill)

V. Kac (MIT)

S. Kudla (Maryland)

R. Murty (Queen's)

T. Ransford (Laval)

F. Shahidi (Purdue)

R. Vakil (Stanford)

M. Zworski (California-Berkley)

J. Totten (Thomson Rivers)

CRUX Mathematicorum with Mathematical MAYHEM

Editor-in-Chief

R. Bilinski (Coll. Montmorency)

I. Bluskov (UNBC)

R. Brewster (Thomson Rivers)

B. Crofoot (Thomson Rivers)

C. Fisher (Regina)

Skoliad Editor

Problems Editor

Associate Editor

Problems Editor

B. Gilligan (Regina) Articles

S. Godin (Ottawa Carleton D.S.B.) Mayhem Editor
J. Grant McLoughlin (UNB Fred.) Book Reviews
B. Shawyer (Memorial) Editor at Large
E. Wang (Wilfrid Laurier) Problems Editor
R. Woodrow (Calgary) Olympiad Editor
G. P. Wright (Ottawa) Managing Editor

CMS Notes

R. Dawson (Saint Mary's) Editor-in-Chief S. Swaminathan (Dalhousie) Editor-in-Chief

E. Barbeau (Toronto) Contributing Editor - Education

P. Fillmore (Dalhousie) Book Reviews

G. Jeewanjee (CMS) Meetings

G. P. Wright (Ottawa) Managing Editor

CMS Books in Mathematics

J. Borwein (Dalhousie) Editor-in-Chief

K. Dilcher (Dalhousie) Editor-in-Chief

P. Borwein (SFU)

R. Kane (Western)

S. Shen (Alberta)

A Taste Of Math (ATOM)

B. Shawyer (Memorial) Editor-in-Chief

E. Barbeau (Toronto)

A. Thompson (Dalhousie)

G. P. Wright (Ottawa) Managing Editor

CMS Treatises in Mathematics - from July 1

J. Arthur (Toronto)

I. Ekeland (UBC)

A. Gupta (Simon Fraser)

B. Keyfitz (Fields/Houston)

F. Lalonde (Montréal)

Contributors

The Canadian Mathematical Society would like to acknowledge the following members, individuals, governments, foundations, institutes and corporations for their financial support and encouragement. In addition to these supporters, more than 60 others contributed anonymously to the Society's various activities.

János D. Aczél

Abiodun Emmanuel Akinbowale

Brian R. Alspach

Baba Tonka High School of Mathematics

Lennard F. Bakker B. Banaschewski

Banff International Reseach Station

William D. Banks Edward J. Barbeau Margherita Barile Marcus Emmanuel Barnes

Howard E. Bell Dieter Bennewitz J.A. Rod Blais

Juan Manuel Urbano Blanco Christopher John Bradley David C. Brydges Sydney D. Bulman-Fleming

W.D. Burgess L. Lorne Campbell

Canadian Applied and Industrial Math Society

Ertuarul E. Celik

Centre de recherches mathématiques

Jonathan Choate J.R. Choksi ConocoPhillips Canada Paolo Custodi

Paolo Custodi Dalhousie University Chandler Davis Dominick J DelCasale Charles R. Diminnie Dragomir Z. Djokovic Daryl W. Dolny

Don Mills Collegiate Institute

Kokou B. Dossou Edmonton Public Schools

Shuxiong Fei Parviz Fekrat Fields Institute J. Chris Fisher Alexandra R. Gall Charles R. Garner Keith O. Geddes Allan A. Gibb Edgar G. Goodaire

Evelyn Grant

Government of Alberta
Government of New Brunswick

Government of Newfoundland & Labrador Government of the Northwest Territories Government of Nova Scotia

Government of Ontario Government of Saskatchewan Gouvernement du Québec Kathryn E. Hare

Kathryn E. Hare Ronald Harrop Bert L. Hartnell Katherine Heinrich James P. Henniger John G. Heuver Richard Hoshino Laurence G. Hoye Cyrus Chen Hsia Tagdir Husain

Imperial Oil Foundation

Institut des sciences mathématiques

Jeannette C.M. Janssen Barry J. Jessup Spiros Karigiannis Murray S. Klamkin Hans Kummer Chikaya Kunihiko Kee-Wai Lau David J. Leeming Kathy Lewis Hao (William) Li

Samuel T. Lisi John Lord Trueman MacHenry Math Resources Inc. Maplesoft

McGraw Hill Ryerson McGill University McMaster University

McNally Composite High School

C.E. Mannix Jr. Samuel Melamed Paul Milnes MITACS

Robert P. Morewood Benjamin N. Moyls

National Science and Engineering Research

Council of Canada (NSERC) NSERC - PromoScience Nelson Thomson Learning Louis Nirenberg Richard J. Nowakowski

Pacific Institute for the Mathematical Sciences

Pearson Education Pu Peng Perimeter Institute Klaus Peters Daniel G. Piché Dorette Pronk Young Soo Rhee

David L. Rodgers

Sherman D. Riemenschneider Francisco Luis Rocha Pimentel

Rodriguez Gil Christiane Rousseau Michael A. Ruxton Patrick J. Ryan David Ryeburn Gert O. Sabidussi Thomas S. Salisbury Samuel Beatty Fund Saint Mary's University

Bill Sands Alyssa Sankey F. Arthur Sherk Peide Shi

Simon Fraser University

Sir John A. MacDonald Collegiate Institute

Eckard Specht Springer-Verlag

Statistical Society of Canada

Sun Life Financial Yorgos Stylianos Jon H. Thompson James G. Timourian Peter O. Timusk Daryl W. Tingley Elmer M. Tory

Toronto District School Board

Université du Québec à Montréal-UQAM

Université de Montréal Université Laval University of Alberta University of British Columbia University of British Columbia Department of Mathematics University of Calgary

University of Manitoba

University of New Brunswick - Fredericton University of Ottawa

University of Prince Edward Island

University of Regina
University of Saskatchewan
University of Waterloo

University of Waterloo - Centre for Education vin Mathematics and Computing (CEMC)

University of Western Ontario University of Winnipeg University of Toronto Schools Rémi Vaillancourt

Rémi Vaillancourt Vaughan Road Academy Jean-Eudes J.E.V. Villeneuve

Waterloo Region District School Board

Howard Weiner
J. Harley Weston
Harry White
John H.M. Whitfield
John Wiley
Robert E. Woodrow
R. Grant Woods
Graham P. Wright

York University - Dean of Arts

Noriko Yui Michel Zarka Yingfeng Zhao Ping Zhou Li Zhou

CMS Executive Committee

President

H.E.A. Eddy Campbell (MUN)

Past-President to June 30

Christiane Rousseau

President-Elect from July1

Thomas S. Salisbury (York)

Vice-Presidents to June 30

Steven Boyer (UQAM)

Kathryn Hare (Waterloo)

Samuel Shen (Alberta)

Jon Thompson (UNB Fred.)

Vice-Presidents from July 1

Jason Brown (Dalhousie)

M. Ram Murty (Queen's)

Edwin Perkins (UBC)

Bruno Rémillard (HEC)

Treasurer

F. Arthur Sherk (Toronto)

Executive Director and Secretary

Graham P. Wright (Ottawa)

CMS Board of Directors

Joy Abramson (York)

David L. E. Bates (Manulife Financial)

Michael Bennett (UBC) from July 1

Murray R. Bremner (Saskatchewan)

Jason I. Brown (Dalhousie) from July 1

Steven Boyer (UQAM) to June 30

H.E.A. Eddy Campbell (MUN)

Richard Caron (Windsor) to June 30

Imin Chen (SFU) from July 1

Olivier Collin (UQAM) from July 1

Galia Dafni (Concordia SGW) to June 30

Matt Davison (Western)

Margorzata Dubiel (Simon Fraser) to June 30

Marlène Frigon (Montréal)

Terry Gannon (Alberta)

Kathryn Hare (Waterloo) to June 30

Jennifer Hyndman (UNBC) from July 1

Jeannette C.M. Janssen (Dalhousie)

Tomasz Kaczynski (Sherbrooke) to June 30

Antoine Khalil (Concordia)

Dan Kucerovsky (UNB Fred.)

Victor G. LeBlanc (Ottawa) from July 1

Gordon MacDonald (UPEI) to June 30

L.W. Marcoux (Waterloo) to June 30

Javad Mashreghi (Laval) from July 1

Robert J. McCann (Toronto) from July 1

Franklin Mendivil (Acadia) from July 1

Tianzuan Miao (Lakehead) to June 30

M. Ram Murty (Queen's) from July 1

Matthias M. Neufang (Carleton) from July 1

Ortrud Oellermann (Winnipeg) to June 30

Michael Overton (New York) to June 30

Edwin A. Perkins (UBC) from July 1

Klaus Peters (A.K. Peters)

David A. Pike (Memorial) from July 1

Abraham Punnen (UNBSJ) to June 30

Bruno Rémillard (HEC) from July 1

Christiane Rousseau (Montréal) to June 30

Damien Roy (Ottawa) to June 30

Thomas S. Salisbury (York) from July 1

Samuel Shen (Alberta) to June 30

F. Arthur Sherk

Juris Steprans (York)

Walter Stewart

Jon Thompson (UNB Fred.) to June 30

John A. Toth (McGill)

Ravi Vakil (Stanford) from July 1

Stan Wagon (Macalester College)

Hugh C Williams (Calgary)

Graham P. Wright (Ottawa)

CMS Executive Office

Canadian Mathematical Society 577 King Edward Ottawa, Ontario K1N 6N5 Telephone: (613) 562-5702 Fax: (613) 565-1539

> office@cms.math.ca www.cms.math.ca

CMS Executive Office

Graham Wright Executive Director and Secretary

Jonathan Borwein Associate Publisher

Alan Kelm Web Services Manager

Yvette Roberts Accountant

Liliane Sousa Membership and Publications Agent

Gertrud Jeewanjee Meetings Coordinator

Nathalie Blanchard Assistant to the Executive Director

Suzanne Lalonde Administrative Clerk

Tina LaPage Database Clerk

Raju Kallumkal Web Services Consultant

Publications Office

Craig Platt (Manitoba) Technical Editor

Srinivasa Swaminathan (Dalhousie) Associate Technical Editor Michael Doob (Manitoba) Technical Consultant Judith D. Borwein Digital Assistant

Penny Gilbert (Manitoba) Administrative Assistant Laura Kirkland (Manitoba) Technical Assistant