CMS
NOTES
de la SMC

Volume 35 No. 1-2 February-March / février-mars 2003

In this issue / Dans ce numéro

Du bureau de la présidente

Christiane Rousseau

(See page 32 for english version)

Nous avons terminé l'année 2002 en beauté avec la réunion d'hiver organisée par l'Université d'Ottawa. Le soutien de l'Université d'Ottawa pour l'occasion s'inscrit dans la longue tradition de collaboration fructueuse entre notre société et l'Université d'Ottawa.

Cette réunion a comporté quatre conférences plénières, une conférence publique et deux conférences de prix. À cela se sont ajoutées 13 sessions spéciales, couvrant un vaste éventail de sujets, dont quatre sessions en mathématiques appliquées, une session en éducation, une session en histoire des mathématiques et une session de communications.

Nous avons eu le plaisir d'honorer plusieurs de nos membres. Ainsi la *conférence Coxeter-James* a été donnée par Lisa Jeffrey, de l'Université de Toronto. La *conférence du prix de doctorat* a été donnée par David Kerr qui a reçu son doctorat de l'Université de Toronto. Nous avons eu l'occasion de remercier Peter Lancaster de l'Université de Calgary de sa contribution importante à l'avancement des mathématiques au pays en lui remettant le *Prix pour service méritoire*. Les récipiendiaires du Prix G. de B. Robinson sont Ted Chinburg, Manfred Kolster et Victor Snaith pour leur article "Comparison of K-theory Galois module structure invariants" paru au Journal Canadien de Mathématiques en 2000.

Les quatre conférenciers pléniers ont été James Arthur (Toronto), René Carmona (Princeton), Victor Guillemin (MIT) et Maciej Zworski (Berkeley). La conférence publique a été donnée par Robert Zuccherato d'Entrust: elle a porté sur les mots de passe et la manière de se protéger d'attaques indésirables.

Au nom de tous les participants de cette réunion nous remercions chaleureusement Daniel Daigle, président et coordonnateur de la réunion, Walter D. Burgess et André Dabrowski, présidents du comité local d'organisation, les membres du comité de programme et tous les membres de l'Université d'Ottawa qui ont mis la main à la pâte. Nous remercions aussi le personnel administratif de la SMC qui travaille avec professionalisme et ardeur à la préparation de nos rencontres.

(see PRÉSIDENTE–page 4)

CMS NOTES
NOTES DE LA SMC

The *CMS Notes* is published by the Canadian Mathematical Society (CMS) eight times a year (February, March, April, May, September, October, November, and December).

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ISSN: 1193-9273 (Print); 1496-4295 (Online)

EDITORIAL

S. Swaminathan

One of the joys of working on a project is receiving appreciation of the work. During the Winter Meeting of the CMS in Ottawa, I was pleased to hear commendable remarks on the NOTES. Peter Fillmore and I express our thanks.

With this issue Peter Fillmore is completing his five-year term as Editor-in-Chief of the NOTES collaborating with me. Regrettably he has decided not to continue for another term. Peter's contributions went a long way in restructuring the NOTES. His work has been valuable in improving the contents, readability and the appearance of the issues. It has been a great pleasure working with him. Peter has kindly agreed to stay on to help with the Book Reviews section.

From the next issue Robert Dawson joins me as Editor-in-Chief of the NOTES. I take this opportunity to welcome him. Robert is well known for his keen analytical skills. I look forward to a fruitful collaboration with him.

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À la dernière Réunion d'hiver de la SMC, tenue à Ottawa, j'ai eu le bonheur de recevoir des commentaires élogieux à propos des NOTES. Si vous avez déjà collaboré à un projet, vous savez qu'il s'agit d'un encouragement de taille. De la part de Peter Fillmore et de moi-même, un grand merci. En décembre 2002, Peter Fillmore a terminé son mandat de cinq ans comme rédacteur en chef des NOTES à mes côtés. Je regrette qu'il ait décidé de ne pas accepter un second mandat, car Peter a joué un rôle important dans la restructuration des NOTES. Entre autres, il a grandement contribué à améliorer la qualité, la lisibilité et l'apparence du bulletin. Ce fut un grand plaisir pour moi de travailler avec lui. Peter a eu la gentillesse de rester dans l'équipe de rédaction à titre de responsable des critiques de livres.

C'est Robert Dawson qui prend sa place comme second rédacteur en chef des NOTES. Bienvenue à bord! Robert est reconnu pour son sens aigu de l'analyse. Il ne fait nul doute à mon esprit que nous établirons une collaboration fructueuse.

NOTICE

We regret that for technical reasons it has been necessary to combine the February and March issues, and apologize for any inconvenience resulting from this. Regular publication will resume with the April issue.

AVIS

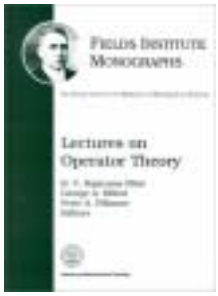
Pour des raisons techniques, nous avons malheureusement été contraints de combiner les numéros de février et de mars. Nous nous excusons de tout inconvénient que cette situation pourrait entraîner. Le format habituel reprendra en avril.

BOOK REVIEWS

The World According to Operator Algebraists

Book review by Ola Bratteli, University of Oslo

Lectures on Operator Theory
B.V. Rajarama Bhat, George A. Elliott
and Peter A. Fillmore (eds)
Fields Institute Monographs, 13
American Mathematical Society, 1999
xi + 323 pp



The theory of algebras A on a Hilbert space H which are closed under the adjoint operation $a \to a^*$ has at the outset two different branches with very different flavors, according to whether the algebras are closed in the topology defined by the operator norm $a \to \|a\|$ or in the topology defined by the strong semi-norms $a \to \|a\xi\|$ for $\xi \in H$, These two types of algebras are called C*-algebras and von Neumann algebras, and their study may be labelled "non-commutative topology" and "non-commutative measure theory", respectively. These names reflect the fact that the study of the two types of algebras are as different as the study of the two topics topology and measure theory. The names also indicate that these algebras may, at least in principle, provide the same fundamental conceptual framework for studying non-commutative or quantum phenomena as topology and measure theory do for classical phenomena.

This description of the field of operator algebras was at least apt when the reviewer entered the subject before 1970, at which time the bible to get into the the subject were Dixmier's two books on the two branches of the subject. At this time it was still more or less possible for an ordinary mortal to get an overview of the whole subject. Since then it has grown and scattered into various sub-specialities, and cross-fertilized with other topics to such an extent that it has become difficult to keep abreast of all developments. Dixmier's books have reference lists containing all the papers on operator algebras up to the printing date, and as late as 1980 Dick Kadison was still able to collect all the troops in the subject to a three week conference on operator algebras in Kingston which covered all the specialities up to then. At present it is certainly not possible to arrange a comprehensive conference on the subject, and much less possible for one author (maybe excepting Alain Connes) to write one book encompassing it all.

Instead the editors of the present volume have had the idea of dishing out the subject in small pieces to several authors, so that each of them could write an account of his or her piece of the cake. There are altogether 25 authors. With the exception of the last two sections, the book is written in a uniform encyclopedic style, and it is not even stated which author is responsible for which part of the book. The book is based on lectures given by the authors in the program "Operator Algebras and Applications" which was held at the Fields Institute during the heyday of George Elliott's classification program for amenable C*-algebras in 1994-95. The Fields Institute was then based in Waterloo.

The book covers most of the topics in operator algebras:

Part 1, about C*-algebras, contains basic theory of positivity, K-theory, tensor products, crossed products, free products, dilation theory and operator spaces, applications to quantum statistical mechanics, and applications to Toeplitz operators. One can always look at an encyclopedic book like this from the viewpoint of the devil to find some missing topic to complain about, and I missed some basic material about C*-dynamical systems in the context of locally compact groups: Arveson spectrum and all the results on conjugacy, outer conjugacy, etc., which developed from Connes's classification of factors in the seventies. This seems to be material that is falling into oblivion now, even to the extent that old results are re-proved.

Part 2, about von Neumann algebras, contains basic structure, type II_1 factors, a long section on Connes's and Haagerup's proof on the equivalence of injectivity and hyperfiniteness, an introduction to sub-factors and the Jones index, the Tomita-Takesaki theory of the modular group, Voiculescu's theory of free products of von Neumann algebras and Arveson's and Powers' theory of semi-groups of endomorphisms of $B(H)$, a surprisingly difficult subject which is still under development. It was maybe wise to avoid a full scale treatment of Connes' classification of injective factors, especially in view of Takesaki's much awaited book, which finally seems to be forthcoming now. I missed a chapter about the Italian version of quantum field theory and relation to sub-factors here, but you cannot win them all.

Part 3, is about the classification of of C*-algebras, both for finite and infinite algebras. Eberhard Kirchberg, Chris Phillips and Mikael Rördam made great strides in the classification of infinite C*-algebras just during the Waterloo year, and Elliott and his coworkers were prolifically producing

new results on the classification of finite C*-algebras both before and after this year, to the extent that this subject maybe presently shows signs of elephantiasis and a need for fresh ideas and concepts.

Part 4 contains Irina Stevens' Ph.D. thesis on hereditary sub-algebras of certain simple non real rank zero C*-algebras, which is a nice illustration of Elliott's classification techniques for inductive limits.

Part 5 is a 90 page richly illustrated article by Adrian Ocneanu on paths on Coxeter diagrams and sub-factors. This article is particularly welcome in view of the paucity of written communication from Ocneanu, and it is based on videotapes of several of his lectures in the period 1995 - 1998.

Overall this is a very nicely and surprisingly uniformly written book which is of interest both for the novice and the expert in operator algebras. It is aimed at giving an overview of the subject, and as mentioned it covers most subjects, although one may always miss things like spectral triples and non-commutative geometry, quantum groups and I don't know what. Maybe the subject of operator algebras presently lacks a really new concept to speed up development (or at least it may look like that to someone old and infirm like the reviewer), like Connes' spectral analysis of automorphisms after 1970, Jones' sub-factors in 1980 and Voiculescu's free algebras around 1990. It may be hoped that the book will inspire some young researcher to new invention.

(PRÉSIDENTE – continued from page 1)

Le Conseil d'administration s'est réuni le samedi 7 décembre en après-midi. Lors de cette réunion il a entériné la décision de présenter la candidature de la SMC pour devenir membre associé d'ICIAM (International Council of Industrial and Applied Mathematics). Ce conseil a pour mandat de promouvoir au niveau international les mathématiques appliquées et industrielles, de faciliter les interactions entre les sociétés membres et de coordonner la planification des congrès internationaux, lesquels, comme les congrès internationaux des mathématiciens, se tiennent aux 4 ans.

Le prochain congrès d'ICIAM se tiendra à Sydney du 7 au 11 juillet 2003. En tant que grande société au statut de membre associé la SMC aura droit à un vote lors des réunions du Conseil d'administration d'ICIAM. ICIAM a 4 prix décernés tous les quatre ans lors des congrès: le Prix Lagrange ICIAM décerné à un(e) mathématicien(ne) ayant fait des contributions exceptionnelles en mathématiques appliquées et industrielles, le Prix Collatz ICIAM, décerné à un(e) jeune mathématicien(ne) (moins de 42 ans) ayant fait des contributions exceptionnelles en mathématiques appliquées et industrielles, le Prix Pionnier ICIAM et le Prix Maxwell ICIAM pour un(e) mathématicienne ayant démontré de l'originalité en mathématiques appliquées. La Société canadienne de mathématiques appliquées et industrielles (SCMAI) est quant à elle membre d'ICIAM. Pour plus d'informations vous pouvez consulter le site d'ICIAM: www.iciam.org

La SMC est heureuse de se joindre à Nelson A. Thompson pour la création du *prix d'excellence en enseignement de la SMC, soutenu par Nelson A. Thompson*. Ce prix, distinct du prix Adrien-Pouliot en éducation mathématique vise à reconnaître l'excellence en enseignement mathématique au niveau cegep ou premier cycle. La création de ce prix témoigne de l'importance que nous accordons à la qualité de l'enseignement sous toutes ses formes, par exemple par la création de matériel pour les cours, ou encore par l'influence sur les étudiants et autres enseignants. Le prix sera dćerné chaque année lors de la réunion d'été de la SMC, le premier prix étant décerné à Dalhousie en 2004. L'appel de candidatures sera lancé en septembre de chaque année à compter de 2003 et la date limite pour soumettre les candidatures sera le 15 décembre de chaque année.

Le conseil d'administration a pris le temps de discuter en détails de la situation financière de la SMC. Les dépenses de la SMC sont bien contrôlées mais les revenus sont en baisse, suite principalement à la diminution du nombre d'abonnements à nos périodiques, si bien qu'à moins de trouver de nouvells sources de revenus nous risquons de devoir couper dans nos activités d'éducation. Le fonds de dotation a également perdu de sa valeur suite à la baisse des marchés financiers. À l'époque de sa constitution il avait été convenu que la SMC contribue ses surplus d'opération au fonds de dotation jusqu'à ce qu'il atteigne le seuil de 1,5 million$. Il avait ensuite été convenu de dépenser 4% par an, ce qui devait assurer le maintien du fonds. Les revenus du fonds sont distribués via le concours de bourses du fonds de dotation. En octobre dernier, suite à la baisse des marchés, le fonds de dotation a atteint le plancher de 1,4 million$. De plus la période de surplus budgétaires est terminée. Le Conseil d'administration a pu entendre les points de vue des membres du comité des finances et des membres du comité d'attribution des bourses du fonds de dotation sur l'avenir de la situation financière de la SMC et sur le bien-fondé de tenir un concours de bourses du fonds de dotation en 2004. Il a été décidé de maintenir un petit concours en 2004, financé principalement par les sommes non distribuées lors des compétitions antérieures. Nous travaillerons ces prochaines années au redressement des finances de la SMC. En particulier nous sommes à la recherche d'un responsable des publications ayant pour tâche de faire la promotion de nos publications et d'être à la recherche de nouveaux manuscrits.

Parmi les événements majeurs de 2003 mentionnons le Forum canadien sur l'enseignement des mathématiques qui se tiendra à l'UQAM les 16–18 mai 2003. Vous pouvez trouver le programme à *http://www.smc.math.ca/Reunions/FCEM2003/*

AWARDS / PRIX

G. de B. Robinson Award
Prix G. de B. Robinson

For an outstanding publication in the CJM 2000-2001:
Comparison of K-Theory Galois Module Structure Invariants, by *Ted Chinburg, Manfred Kolster and Victor Snaith*
CJM Volume 52 no.1 2000, pp. 47–91

This challenging paper establishes the equality of two subtly-defined invariants in the class group of the integral group ring of the Galois group of a Galois extension of number fields. This has important implications for the Galois module structure of associated K-groups, and has already found key applications in the calculations of certain quaternionic examples.

The authors have masterfully accomplished the challenging task of presenting these complicated matters, and their contribution is sure to be influential in the study of the Galois module structure of K-groups of number fields.

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Cet article stimulant établit l'égalité de deux invariants subtilement définis dans le groupe de classes de l'anneau du groupe d'entiers du groupe de Galois d'une extension galoisienne des domaines du nombre. Ces travaux ont des répercussions considérables sur la structure du module de Galois des groupes K associés, et ont déjà engendré des applications clés dans le calcul de certains exemples quaternioniques.

Les auteurs ont réussi à présenter avec brio ces sujets complexes, et il ne fait nul doute que leurs travaux influenceront l'étude de la structure du module de Galois des groupes K de domaines du nombre.

Ted Chinburg

Ted Chinburg is from Colorado and was an undergraduate at Harvey Mudd College. He finished his Ph.D. at Harvard University in 1980, under the supervision of John Tate. He has taught at the University of Washington, Columbia University and, since 1989, at the University of Pennsylvania. His recent research has been on Galois module structure, Arakelov theory, deformation theory, and ways to avoid administrative work.

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Ted Chinburg est né au Colorado et il a fait ses études de premier cycle au Collège Harvey Mudd. Il a terminé son doctorat à l'Université de Harvard en 1980, avec John Tate comme directeur de thèse. Il a enseigné à l'Université de Washington, à l'Université Columbia et, depuis 1989, il est professeur à l'Université de Pennsylvanie. Ses travaux les plus récents ont porté sur la structure du module de Galois, la théorie d'Arakelov, la théorie de la déformation, et les moyens d'éviter les tâches administrative.

Manfred Kolster

Manfred Kolster was born in Hamburg, Germany and obtained a Diploma degree in Mathematics from the University of Hamburg in 1970. In 1975. he finished his Ph. D. in Mathematics at the University of Saarbruecken under the supervision of M.Knebusch. He was an Assistant Professor at the University of Muenster, where he also finished his Habilitation in 1985. In 1989 he joined the Department of Mathematics at McMaster University. His research fields are Algebraic Number Theory and Algebraic K-Theory.

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Manfred Kolster est né à Hambourg, en Allemagne, et il a obtenu un diplôme de mathématiques de l'Université de Hambourg en 1970. En 1975, avec M. Knebusch comme directeur de thèse, il a obtenu son doctorat en mathématiques à l'Université de Saarbruecken. Il a été professeur adjoint à l'Université de Muenster, où il a completé l'Habilitation en 1985. Il s'est joint au Département de mathématiques de l'Université McMaster en 1989. Ses domaines de recherche sont la théorie algébrique des nombres et la K-théorie algébrique.

Victor Snaith

Born in Colchester, England and educated at Pembroke College, Cambridge, Victor Snaith completed a Ph.D. at the University of Warwick in 1969. He was a College Lecturer at Emmanuel College, Cambridge, moving to University of Western Ontario in 1976 and to the R.F. Britton Professorship of Mathematics at McMaster University in 1988 where he stayed till 1998. Currently he is a professor at the University of Southampton. Snaith has made important contributions to the areas of algebraic topology, number theory, algebraic K-theory, representation theory, and algebraic geometry. He received the Cambridge University Rayleigh Prize for Research (1968), became a Fellow of the Royal Society of Canada (1984), the University of Western Ontario Florence Bucke Prize for Research (1987), the UWO Research Professorship (1987 to 1988) and the Leverhulme Research Fellowship (2001-2003). Snaith was elected a Fields Institute Fellow in 2002 in recognition of services to Canadian mathematics.

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Victor Snaith est né à Colchester (Royaume-Uni), il a fait ses études au Collège Pembroke (Cambridge) et il a obtenu son doctorat à l'Université de Warwick en 1969. Il a enseigné au Collège Emmanuel (Cambridge), il est ensuite passé à l'Université de Western Ontario (UWO) en 1976 et a été titulaire de la chaire R.F. Britton de mathématiques à l'Université McMaster en 1988, où il est demeuré jusqu'en 1998. En ce moment, il est professeur à l'Université de Southampton. Victor Snaith a grandement contribué à la topologie algébrique, à la théorie des nombres, à la K-théorie algébrique, à la théorie des représentations et à la géométrie algébrique. Il a reçu le prix de recherche Rayleigh de Cambridge (1968), il membre de la Société royale du Canada depuis 1984, et il a reçu le prix de recherche Florence-Bucke de l'UWO (1987) et la bourse de professeur-chercheur de la même université (1987 - 1988), ainsi que la bourse de recherche Leverhulme (2001-2003). Victor Snaith est devenu membre de l'Institut Fields en 2002 pour ses loyaux services à la communauté.

The Award - Le Prix

The G. de B. Robinson Award was inaugurated to recognize the publication of outstanding papers in the Canadian Journal of Mathematics (CJM) and the Canadian Mathematical Bulletin (CMB) and to encourage the submission of the highest quality papers to these journals. The first award was presented in 1996.

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La SMC a créé le Prix G. de B. Robinson dans le but de souligner la parution d'articles exceptionnels dans le Journal canadien de mathématiques (JCM) ou le Bulletin canadien de mathématiques (BCM) et d'encourager la publication d'articles de qualité supérieure dans ces revues. Ce prix a été remis pour la première fois en 1996.

The 6th Doctoral Prize
Le 6e Prix de doctorat

David Kerr
University of Toronto

In his doctoral thesis in operator theory ("Pressure for automorphisms of exact C*-algebras and a non-commutative variational principle") Dr. Kerr was concerned with the notion of pressure and dynamical entropy in the context of non-commutative dynamical systems. He proposed the first systematic formulation in the non-commutative setting of the variational principle. The key to his approach was the definition of the dynamical pressure of exact C*- algebras which extended the notion of both topological pressure from ergodic theory and Voiculescu-Brown operator-algebraic approximation entropy. His results have been called a definitive contribution to his field of study.

David Kerr has succeeded in making a significant contribution to a competitive field of research and he is cited for

his mastery of a difficult area of research as well as his mathematical maturity and judgement.

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Dans sa thèse de doctorat sur la théorie des opérateurs, intitulée “Pressure for automorphisms of exact C*-algebras and a non-commutative variational principle”, David Kerr s’est intéressé à la notion de pression et d’entropie dynamique dans le contexte des systèmes dynamiques non-commutatifs. Il a proposé la première formulation systématique dans l’environnement non-commutatif du principe de variation. L’élément clé de sa démarche est la définition de la pression dynamique des C*-algèbres exacts, qui étendent à la fois les notions de la pression topologique de la théorie ergodique et l’entropie de l’approximation des algèbres d’opérateurs Voiculescu-Brown. On a dit de ses résultats qu’il s’agissait d’une importante contribution au domaine d’étude.

David Kerr a réussi à contribuer de façon importante à un domaine de recherche où la concurrence est vive. On reconnaît d’emblée sa connaissance exceptionnelle d’un domaine de recherche complexe ainsi que sa maturité et son jugement mathématique.

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Born in Ottawa, Dr. Kerr obtained his Bachelor’s degree from the University of Waterloo in 1994, his Master’s degree from the University of Toronto in 1995, and his Ph. D. from the University of Toronto in 2001 under the supervision of Dr. George Elliott.

He received an Ontario Graduate Student Award in 1999 and NSERC post-graduate scholarships from 1994 to 1998. He currently holds an NSERC Postdoctoral Fellowship which is being spent at the University of Tokyo and the University of Rome. Originaire d’Ottawa, David Kerr a obtenu son baccalauréat de l’Université de Waterloo en 1994, sa maîtrise de l’Université de Toronto en 1995 et son doctorat de la même université en 2001. Son directeur de thèse était le professeur George Elliott.

Il a reçu une bourse d’études supérieures de l’Ontario en 1999 et des bourses d’études supérieures du CRSNG de 1994 à 1998. Il bénéficie en ce moment d’une bourse de recherche postdoctorale du CRSNG, qu’il utilise pour faire des recherches à l’Université de Tokyo et à l’Université de Rome.

The Award - Le Prix

The CMS Doctoral Prize was inaugurated to recognize outstanding performance by a doctoral student who graduated from a Canadian University in the preceding year (January 1st to December 31st). The CMS Doctoral Prize consists of an award of $500, a two-year complimentary membership in the CMS, a framed Doctoral Prize Certificate and a stipend for travel expenses to attend the CMS Winter Meeting to receive the award and present a plenary lecture. The first award was presented in 1997.

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La SMC a créé le Prix de doctorat pour récompenser le travail exceptionnel d’un étudiant au doctorat en mathématiques ayant obtenu un diplôme d’une université canadienne entre le 1er janvier et le 31 décembre de l’année précédente. Le lauréat du Prix de doctorat de la SMC reçoit une bourse de 500 $. De plus, la SMC lui offre l’adhésion gratuite à la Société pendant deux ans et lui remet un certificat encadré et une subvention pour frais de déplacements lui permettant d’assister à la réunion d’hiver de la SMC où il recevra son prix et présentera une conférence. Ce prix a été décerné pour la première fois en 1997.

The 25th Coxeter-James Lecturer
La 25e conférence Coxeter-James

Lisa Jeffrey
University of Toronto

Lisa Jeffrey’s research involves significant and difficult problems at the forefront of several deep mathematical areas: symplectic geometry, algebraic geometry, mathematical physics and differential geometry. She has made major contributions to all of these fields. Lisa Jeffrey has been involved in the proof of two of the most important conjectures in equivariant symplectic geometry. The proof of Witten’s conjecture, which she obtained in collaboration with Frances Kirwin, introduced the powerful technique of non-abelian localization which has had important applications. She is the author of “Quantum Fields and Strings: a Course for Mathematicians” - the definitive work for mathematicians on the important recent interaction between theoretical physics and geometry.

Les travaux de Lisa Jeffrey portent sur de grands problèmes complexes à l'avant-plan de plusieurs domaines mathématiques : la géométrie symplectique, la géométrie algébrique, la physique mathématique et la géométrie différentielle. Elle a grandement contribué à chacun de ces domaines.

Lisa Jeffrey a contribué à prouver deux des plus importantes conjectures de la géométrie symplectique équivariante. La preuve de la conjecture de Witten, qu'elle a établie en collaboration avec Frances Kirwin, a lancé la technique puissante de localisation non abélienne, qui a donné lieu à des applications importantes.

Elle est aussi l'auteure de Quantum Fields and Strings: a Course for Mathematicians, référence de base des mathématiciens sur l'interaction importante et récente entre la physique et la géométrie théoriques.

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Dr. Lisa Jeffrey obtained her A.B. from Princeton University in 1986, and her Ph.D. from Oxford University in 1992, under the direction of M.F. Atiyah. Prior to joining the University of Toronto in 1997, she was a faculty member at Princeton University and McGill University. Dr. Jeffrey attained the rank of full professor in 1997. She won the Aisenstadt Prize from the CRM in 1996, was awarded a Sloan Fellowship in 1997, an Ontario Premier's Research Excellence Award in 1999 and the CMS Krieger-Nelson Prize in 2001.

Lisa Jeffrey a obtenu un baccalauréat ès arts de l'Université Princeton en 1986 et son doctorat de l'Université Oxford en 1992; elle a fait sa thèse avec M. F. Atiyah. Avant son arrivée à l'Université de Toronto en 1997, elle a enseigné à Princeton et à McGill. Devenue professeure titulaire en 1997, Lisa Jeffrey a remporté plusieurs prix et bourses : prix Aisenstadt en 1996, bourse Sloan en 1997, bourse d'excellence en recherche du premier ministre de l'Ontario en 1999 et prix Krieger-Nelson de la SMC en 2001.

The Award - Le Prix

The Coxeter-James Lectureship was inaugurated in 1978 to recognize young mathematicians who have made outstanding contributions to mathematical research and is presented at the Canadian Mathematical Society's Winter Meeting.

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Le prix de conférence Coxeter-James, créé en 1978, rend hommage aux jeunes mathématicien(ne)s qui se sont distingué(e)s par leur apport exceptionnel à la recherche en mathématiques. La conférence est présentée à la Réunion d'hiver de la Société mathématique du Canada.

2002 CMS Distinguished Service Award
Le Prix de la SMC pour service méritoire 2002

Peter Lancaster
University of Calgary

Peter Lancaster was born in Appleby, England, the third of four children. The family moved around northern England as necessitated by his father's work in insurance and eventually settled in Liverpool. Dr. Lancaster entered Liverpool University's School of Architecture, transferred to the honours mathematics program and completed his first degree in 1952.

From 1952 to 1957, Dr. Lancaster worked as an aerodynamicist at the English Electric Company (now British Aerospace) where he began a research career in mathematics motivated by physical problems such as aircraft vibration and stability, and related computational problems. Dr. Lancaster was appointed Assistant Lecturer in Mathematics at the University of Malaya (now the National University of Singapore) and advanced through the ranks to become Senior Lecturer in 1961. His dissertation on the theory of lambda matrices led to a Ph.D. from the University of Singapore in 1964.

In 1962, Dr. Lancaster was appointed Associate Professor in the Department of Mathematics at the fledgling Calgary campus of the University of Alberta, which subsequently became the University of Calgary in 1965. He was instrumental in the development and growth of this young department, was promoted to full professor in 1967, and he has remained at Calgary ever since.

Dr. Lancaster's work over the years includes research in the mathematical analysis of vibrations and gyroscopic sys-

tems, matrix analysis and spectral theory, matrix and operator polynomials, solution of Riccati equations, systems theory and control, as well as numerical analysis and approximation theory. He has over 160 publications, 11 research monographs and textbooks, and the supervision of 9 doctoral students, 6 master students, and 6 postdoctoral fellows. His text on the Theory of Matrices was translated into Russian and widely circulated in the USSR which resulted in him obtaining significant recognition in the former Soviet Union.

He has given invited talks at over 80 different institutions in 17 countries and held several Visiting Professorships at universities throughout the world. His work has been recognized by many awards, including the Killam Resident Fellow (University of Calgary-1977), Fellow of the Royal Society of Canada (1984), Faculty of Science Award of Excellence in Research (University of Calgary-1991), CMS Jeffery-Williams Prize (1991), Dozor Visiting Fellow (Ben Gurion University-1995), Toeplitz Lecturer (University of Tel Aviv, 1997), Humboldt Research Award (Technical University of Darmstadt-2000), and recipient of the Hans Schneider Prize of the International Linear Algebra Society (2002)

His outstanding research career is matched with a remarkable history of service to the mathematical community. He has been the Editor for several journals and he has organized over a dozen research conferences. He was CMS Vice-President from 1973 to 1975), CMS President from 1979 to 1981, Vice-President of the Canadian Applied Mathematical Society from 1993 to 1995, he served on several peer-review committees for NSERC , committees for the Royal Society of Canada as well as being a member of the boards of the Fields Institute (1992-1996) and the Pacific Institute for the Mathematical Sciences, since its inception in 1995.

He has been Emeritus Professor at the University of Calgary since 1994. Dr. Lancaster maintains a highly active research program at the University of Calgary and enjoys the fruits of retirement with his wife Diane.

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Peter Lancaster est né à Appleby, au Royaume-Uni, et il est le troisième d'une famille de quatre enfants. Sa famille s'est déplacée à maintes reprises dans le Nord du pays au gré du travail du père, dans les assurances, avant de s'installer à Liverpool. Peter Lancaster s'est d'abord inscrit à l'École d'architecture de l'Université de Liverpool, avant de passer au programme de mathématiques avec spécialisation. Il a obtenu son premier diplôme dans cette discipline en 1952.

De 1952 à 1957, il a occupé un poste d'aérodynamicien dans une société anglaise (l'ancêtre de British Aerospace) où son intérêt pour des problèmes physiques comme la vibration et la stabilité des aéronefs, et les problèmes de calcul qui s'y rattachent, l'on poussé à faire ses premiers pas en recherche mathématique. Il a obtenu un poste de professeur adjoint de mathématiques à l'Université de Malaya (devenue depuis l'Université nationale de Singapour) et a gravi les échelons jusqu'à décrocher un poste de professeur titulaire en 1961. Sa dissertation sur la théorie des matrices lambda lui a valu un doctorat de l'Université de Singapour en 1964.

En 1962, le professeur Lancaster a obtenu un poste de professeur adjoint au Département de mathématiques du tout nouveau campus de Calgary de l'Université de l'Alberta, devenue l'Université de Calgary en 1965. Artisan important de l'essor de ce jeune département, il est devenu professeur titulaire en 1967 et est toujours demeuré rattaché à cet établissement.

Au fil des ans, le professeur Lancaster a mené des recherches dans de dombreux domaines : analyse mathématique des vibrations et des systèmes gyroscopiques; analyse matricielle et théorie des spectres; polynômes matriciels et polynômes d'opérateurs; solution des équations de Riccati; théorie et contrôle des systèmes; analyse numérique et théorie de l'approximation. Il a à son compte plus de 160 publications, 11 monographies scientifiques et manuels. Il a de plus dirigé 9 thèses de doctorat, 6 de maîtrise et 6 stages de recherche postdoctoraux. Son manuel sur la théorie des matrices a été traduit en russe et est très connu dans les pays de l'ex-URSS, où il jouit d'une solide réputation.

Plus de 80 établissements de 17 pays l'ont invité comme conférencier, et plusieurs universités d'un peu partout dans le monde lui ont déjà confié une chaire de professeur invité. Ses travaux lui ont valu de nombreux prix et distinctions : bourse de recherche Killam (Université de Calgary-1977), membre de la Société royale du Canada (1984); prix d'excellence en recherche de la Faculté des sciences (Université de Calgary-1991); prix Jeffery-Williams de la SMC (1991); bourse de chercheur invité Dozor (Université Ben Gurion -1995); conférencier Toeplitz (Université de Tel Aviv -1997); prix de recherche Humboldt (Université technique de Darmstadt-2000) et prix Hans-Schneider de la Société internationale d'algèbre linéaire (2002).

Sa carrière de chercheur exceptionnelle n'a d'égal que son travail au service de la communauté mathématique. Il a été rédacteur en chef de plusieurs revues et a organisé plus d'une douzaine de congrès de chercheurs. Il a été vice-président de la SMC de 1973 à 1975, puis président de 1979 à 1981, et vice-président de la Société canadienne de mathématiques appliquées de 1993 à 1995. Il a siégé à de nombreux comités d'examen par les pairs du CRSNG et à des comités de la Société royale du Canada. Il a en outre été membre du conseil d'administration de l'Institut Fields (1992-1996) et il est membre de celui de l'Institut de sciences mathématiques du Pacifique depuis la création de l'établissement en 1995.

En 1994, le professeur Lancaster a reçu le titre de professeur émérite de l'Université de Calgary, où il poursuit très activement ses activités de recherche. Il profite des beaux jours de sa retraite avec son épouse Diane.

The Award

In 1995, the Society established the CMS Distinguished Service Award to recognize individuals who have made sustained and significant contributions to the Canadian mathematical community and, in particular, to the Canadian Mathematical Society.

Le Prix

En 1995, la Société mathématique du Canada a créé le Prix de la SMC pour service méritoire pour récompenser les personnes qui contribuent de façon importante et soutenue à la communauté mathématique canadienne et, notamment, à la SMC.

CALLS FOR NOMINATIONS / APPEL DE CANDIDATURES

Coxeter-James, Jeffery-Williams, Krieger-Nelson Prize Lectureships

The CMS Research Committee is inviting nominations for three prize lectureships. These prize lectureships are intended to recognize members of the Canadian mathematical community.

The Coxeter-James Prize Lectureship recognizes young mathematicians who have made outstanding contributions to mathematical research. Nominations may be made up to ten years from the candidate's Ph.D. A nomination can be updated and will remain active for a second year unless the original nomination is made in the tenth year from the candidate's Ph.D. The selected candidate will deliver the prize lecture at the Winter 2004 Meeting in Montreal. Nomination letters should include at least three names of suggested referees.

The Jeffery-Williams Prize Lectureship recognizes mathematicians who have made outstanding contributions to mathematical research. A nomination can be updated and will remain active for three years. The prize lecture will be delivered at the Summer 2005 Meeting. Nomination letters should include three names of suggested referees.

The Krieger-Nelson Prize Lectureship recognizes outstanding research by a female mathematician. A nomination can be updated and will remain active for two years. The prize lecture will be delivered at the Summer 2004 Meeting. Nomination letters should include three names of suggested referees.

The deadline for nominations is **September 1, 2003**. Letters of nomination should be sent to the address below.

Prix de conférence Coxeter-James, Jeffery-Williams, Krieger-Nelson

Le Comité de recherche de la SMC lance un appel à candidatures pour trois de ses prix de conférence. Ces prix ont tous pour objectif de souligner l'excellence de membres de la communaut mathmatique canadienne.

Le prix Coxeter-James rend hommage à l'apport exceptionnel à la recherche de jeunes mathématiciens. Il est possible de proposer la candidature d'une personne qui a obtenu son doctorat il y a au plus dix ans. Les propositions pourront être mises à jour et demeureront actives pendant un an, à moins que la mise en candidature originale ne corresponde à la dixième année d'obtention du doctorat. La personne choisie présentera sa conférence à la Réunion d'hiver 2004, qui aura lieu á Montréal. Les lettres de mise en candidature devraient inclure les noms d'au moins trois répondants possibles.

Le prix Jeffery-Williams rend hommage à l'apport exceptionnel à la recherche de mathématiciens d'expérience. Les propositions pourront être mises à jour et demeureront actives pendant trois ans. La conférence sera présentée à la Réunion d'été 2005. Les lettres de mise en candidature devraient inclure les noms d'au moins trois répondants possibles.

Le prix Krieger-Nelson rend hommage à l'apport exceptionnel à la recherche de mathématiciennes. Les propositions pourront être mises à jour et demeureront actives pendant deux ans. La conférence sera présentée à la Réunion d'été 2004. Les lettres de mise en candidature devraient inclure les noms d'au moins trois répondants possibles.

La date limite pour les mises en candidature est **le 1er septembre 2003**. Faire parvenir vos lettres à l'adresse suivante:

Ragnar-Olaf Buchweitz
CMS Research Committee
Comité de recherche de la SMC
Department of Mathematics, University of Toronto
Toronto, Ontario, Canada M5S 1A1

2003 Adrien Pouliot Award

Nominations of individuals or teams of individuals who have made significant and sustained contributions to mathematics education in Canada are solicited. Such contributions are to be interpreted in the broadest possible sense and might include: community outreach programmes, the development of a new program in either an academic or industrial setting, publicizing mathematics so as to make mathematics accessible to the general public, developing mathematics displays, establishing and supporting mathematics conferences and competitions for students, etc.

Nominations must be submitted on the "Nomination Form" available from the CMS Office. To assure uniformity in the selection process, please follow the instructions precisely. Documentation exceeding the prescribed limits will not be considered by the Selection Committee.

Individuals who made a nomination in 2002 can renew this nomination by simply indicating their wish to do so by the deadline date. Only materials updating the 2002 Nomination need be provided as the original has been retained.

Nominations must be received by the CMS Office no later **April 30, 2003**. Please send six copies of each nomination to the address given below.

Prix Adrien-Pouliot 2003

Nous sollicitons la candidature de personnes ou de groupe de personnes ayant contribué de façon importante et soutenue à des activités mathématiques éducatives au Canada. Le terme "contributions" s'emploie ici au sens large; les candidats pourront être associés à une activité de sensibilisation, un nouveau programme adapté au milieu scolaire ou à l'industrie, des activités promotionnelles de vulgarisation des mathématiques, des initiatives, spéciales, des conférences ou des concours à l'intention des étudiants, etc.

Les candidatures doivent nous être transmises via le "Formulaire de mise en candidature" disponible du bureau de la direction de la SMC. Pour garantir l'uniformité du processus de sélection, veuillez suivre les instructions à la lettre. Toute documentation excédant les limites prescrites ne sera pas considérée par le comité de sélection.

Il est possible de renouveler une mise en candidature présentée l'an dernier, pourvu que l'on en manifeste le désir avant la date limite. Dans ce cas, le présentateur n'a qu'à soumettre des documents de mise à jour puisque le dossier original a été conservé.

Les mises en candidature doivent parvenir au bureau de la SMC avant **le 30 avril 2003**. Veuillez faire parvenir vos mises en candidature en six exemplaires à l'adresse suivante:

The Adrien Pouliot Award / Le Prix Adrien-Pouliot
Canadian Mathematical Society
Société mathématique du Canada
577 King Edward, Suite 109, P.O. Box 450, Station A
C.P. 450, Succ. A
Ottawa, Ontario K1N 6N5

Associate Editors - CJM and CMB

The Publications Committee of the CMS solicits nominations for one Associate Editor for the Canadian Journal of Mathematics (CJM) and the Canadian Mathematical Bulletin (CMB). The appointment will be for five years beginning January 1, 2004. The continuing members (with their end of term) are below.
The deadline for the submission of nominations is **April 15, 2003**. Nominations, containing a curriculum vitae and the candidate's agreement to serve should be sent to the address below.

Rédacteurs associés - JCM et BCM

Le comité des publications de la SMC sollicite des mises en candidatures pour une poste de rédacteur associé du Journal canadien de mathématiques (JCM) et Bulletin canadien de mathématiques (BCM). Le mandat sera de cinq ans et débutera le 1 janvier 2004. Les membres qui continuent suivent.
L'échéance pour proposer des candidats est **le 15 avril 2003**. Les mises en candidature, accompagnés d'un curriculum vitae ainsi que du consentement du candidat(e), devrait être envoyées à l'adresse ci-dessous.

Continuing members / Les membres qui continuent

CJM Editors-in-Chief / Rédacteurs-en-chef du JCM :
Henri Darmon and/et Niky Kamran, McGill (2006)

Rédacteurs-en-chef du BCM / CMB Editors-in-Chief:
James Lewis, Arturo Pianzola; Alberta and/et Noriko Yui; Queen's (2005)

Associate Editors / Rédacteurs associés :

M. Barlow, UBC (2004)	P. Borwein, SFU (2004)
W. Craig (McMaster) (2007)	G. Elliott, Toronto (2005)
A. Geramita, Queen's (2006)	V. Kac, MIT (2006)
F. Lalonde, Montréal (2003)	J. Millson, Maryland (2003)
R. Murty, Queen's (2006)	N. Pippenger, UBC (2004)
F. Shahidi, Purdue (2005)	C. Sulem, Toronto (2003)
M. Zworski, California (2006)	

Dana Schlomiuk, Chair / Président
CMS Publications Committee
Comité des publications de la SMC
Département de mathématiques et de statistique
Université de Montréal, CP-6128 Centre-ville
Montréal, Québec H3C 3J7
chair-pubc@cms.math.ca

CMS Distinguished Service Award

In 1995, the Society established this award to recognize individuals who have made sustained and significant contributions to the Canadian mathematical community and, in particular, to the Canadian Mathematical Society.

The first awards were presented at the 1995 Winter Meeting in Vancouver to Donald Coxeter, Nathan Mendelsohn, John Coleman, Maurice L'Abbé and George Duff. Awards were presented at the 1996 Winter Meeting in London, Ontario to David Borwein and P.G. (Tim) Rooney, at the 1999 Summer Meeting in St. John's, Newfoundland to Michael Doob and S. Swaminathan, and at the 2000 the Winter Meeting in Vancouver, British Columbia to Arthur Sherk. The 2001 award was presented to James Timourian at the Winter Meeting in Toronto and the 2002 award to Peter Lancaster at the Winter Meeting in Ottawa.

Nominations should include a reasonably detailed rationale and be submitted by **March 31, 2003**, to the address below.

Prix de la SMC pour service méritoire

En 1995, la Société mathématique du Canada a créé un nouveau prix pour récompenser les personnes qui contribuent de façon importante et soutenue à la communauté mathématique canadienne et, notamment, à la SMC.

Les premiers lauréats, Donald Coxeter, Nathan Mendelsohn, John Coleman, Maurice L'Abbé et George Duff, furent honorés lors de la réunion d'hiver 1995 à Vancouver. Les lauréats, David Borwein et P.G. (Tim) Rooney, furent honorés lors de la réunion d'hiver 1996 à London, Ontario. Les lauréats, Michael Doob et S. Swaminathan, furent honorés lors de la réunion d'été 1999 à St. John's, Terre-Neuve. Quant aux lauréats 2000-2002, Arthur Sherk fut honoré à la réunion d'hiver 2000 à Vancouver, James Timourian à la réunion d'hiver 2001 à Toronto et Peter Lancaster à la réunion d'hiver 2002 à Ottawa.

Pour les mises en candidature prière de présenter des dossiers suffisamment détaillés et de les faire parvenir, le **31 mars 2003** au plus tard, à l'adresse ci-dessous.

Selection Committee / Comité de sélection
Distinguished Service Award
Prix pour service méritoire
Canadian Mathematical Society
Société mathématique du Canada
577 King Edward, Suite 109, P.O. Box 450, Station A
C.P. 450, Succ. A
Ottawa, Ontario K1N 6N5

CALL FOR SESSIONS / APPEL DE COMMUNICATIONS

CMS Winter Meeting 2003

Additional self-supported sessions play an important role in the success of the Society's semi-annual meetings. The CMS welcomes and invites proposals for self-supported sessions for **Winter 2003 (Simon Fraser University).**

Proposals should include a brief description of the focus and purpose of the session, the number and expected length of the talks, as well as the organizer's name, complete address, telephone number, e-mail address, etc.

These additional sessions will be incorporated with the other sessions, time blocks allocated by the Meeting Director and advertised in the *CMS Notes*, on *Camel* and, if possible, in the *Notices of the AMS* and in publications of other societies. Speakers in these additional sessions will be requested to submit abstracts which will be published in the meeting programme. The following provides information on the sessions confirmed to date.

Those wishing to organize a session should send a proposal to the Meeting Director by the deadline below.

Réunion d'hiver 2003 de la SMC

Les sessions autofinancées contribuent de plus en plus au succès des réunions semi-annuelles de la Société. La SMC encourage ces initiatives et invite les organisateurs(trices) potentiel(les) à soumettre leurs projets pour ce type de sessions à l'occasion de **la réunion d'hiver 2003 (Université Simon Fraser).**

Les projets doivent inclure une brève description du thème et de la motivation de la session, le nombre et la durée des communications prévues, ainsi que le nom et les coordonnées physiques et électroniques de l'organisateur(trice).

Ces sessions additionnelles feront partie du programme, leur horaire sera établi par le directeur de la réunion, et elles seront publicisées dans les *Notes de la SMC*, sur *Camel* et, si possible, dans les *Notices de l'AMS* et les publications d'autres sociétés. Les conférenciers devront soumettre un résumé de leur communication, qui paraîtra dans le programme de la réunion.

Toute personne désireuse d'organiser une session doit faire parvenir un projet au directeur de réunion avant la date ci-dessous.

Deadline: March 31, 2003 / Date limite : le 31 mars 2003

Combinatorics / Combinatoire
Petr Lisonek (SFU) and / et Brett Stevens (Carleton)

Computer Algebra / Algèbre computationnelle
Michael Monagan (SFU)

Dynamical Systems / Systèmes dynamiques
Florin Diacu (Victoria)

Education / Enseignement des mathématiques
Malgorzata Dubiel (SFU)

Graphs and Matroids / Graphes et matroïdes
Luis Goddyn (SFU) and / et Ladislav Stacho (SFU)

History of Mathematics / Histoire des mathématiques
Len Berggren (SFU)

Mathematical Biology / Biologie mathématique
Leah Keshet (UBC)

Models for Atmospheric Fluid Dynamics / Modèles pour la dynamique des fluides atmosphériques
David Muraki (SFU)

Nonlinear Partial Differential Equations / Équations aux dérivées partielles non linéaires
Keith Promislow (SFU) and / et Rustum Choksi (SFU)

Number Theory / Théorie des nombres
Michael Bennett (UBC), Peter Borwein (SFU), Imin Chen (SFU), and / et Stephen Choi (SFU)

Operator Algebras / Algèbres d'opérateurs
Ian Putnam (Victoria) and / et Marcelo Laca (Victoria)

Quantum Cohomology and Mirror Symmetry / Cohomologie quantique et symétrie miroir
Kai Behrend (UBC)

Spectral Analysis on Graphs and Manifolds / Analyse spectrale sur les graphes et les variétés
Izabella Laba (UBC), Joel Friedman (UBC), and / et Stephanie van Willigenburg (UBC)

Universal Algebra and Lattice Theory / Algèbre universelle et théorie des treillis
Jennifer Hyndman (UNBC)

Norman Reilly
Meeting Director, CMS Winter Meeting 2003
Directeur de la Réunion d'hiver 2003 de la SMC
Department of Mathematics
Simon Fraser University
8888 University Drive
Burnaby, British Columbia, Canada V5A 1S6
Tel: (604) 291-4544 Fax: (606) 291-4947
e-mail: nreilly@cs.sfu.ca

2003 ELECTIONS / ÉLECTIONS 2003

Initial Slate and Call for Additional Nominations

The Nominating Committee wishes to announce its initial list of candidates for the 2003 elections. Each candidate named has agreed to stand for the position indicated and to furnish the committee with the biographical information requested. **Further nominations are sought** and will be accepted by the Nominating Committee provided: (i) that each such person is supported in writing by at least five (5) other members of the Society; (ii) that the person has given written acceptance to stand for office and to supply the biographical information which will be requested by the Nominating Committee and (iii) that the information sought in (i) and (ii) is received by **March 15, 2003**.

Additional nominations together with supporting materials should be sent to the address below:

Candidats proposés
et appel aux mises en candidature supplémentaires

Le comité des mises en candidature a établi la liste inititale des candidats aux élections de 2003. Chaque personne sur la liste a exprimé la volonté d'être candidat et de fournir au comité les renseignements biographiques désirés. **Les mises en candidature supplémentaires sont sollicitées** et seront acceptées par le Comité des mises en candidature pourvu: (i) que la personne ait reçu l'appui par écrit d'au moins cinq (5) autres membres de la Société; (ii) que la personne ait accepté par écrit d'être candidate et de fournir les renseignements biographiques qui lui seront demandés par le Comité; et (iii) que les renseignements prévus aux (i) et (ii) nous parviennent avant **le 15 mars 2003.**

Les mises en candidatures supplémentaires avec documents à l'appui doivent être envoyées à l'adresse ci-dessous.

Nominating Committee Chair
Président du Comité des mises en candidatures
Canadian Mathematical Society
Société mathématique du Canada
577 King Edward, Suite 109
P.O. Box 450, Station A / C.P. 450, Succursale A
Ottawa, Ontario K1N 6N5

INITIAL SLATE / CANDIDATS PROPOSÉS

Executive Committee / Comité exécutif

President Elect / Président élu (2003-2004), President / Président (2004-2006) and Past President / Président sortant (2006-2007) :	H.E.A. Campbell (Queen's)
Vice-Presidents / Vice-présidents (2003-2005) :	
Western Provinces and Territories / Provinces de l'ouest et territoires:	Samuel Shen (Alberta)
Ontario:	Kathryn Hare (Waterloo)
Quebec / Québec:	Steven Boyer (UQAM)
Atlantic Provinces / Provinces de l'atlantique:	Jon Thompson (UNB)

Board of Directors / Conseil d'administration (2003-2007)

Atlantic / l'Atlantique (2 to be elected / 2 à élire)	Jeannette Janssen (Dalhousie) Daniel Kucerovsky (UNB)
Quebec / Québec (2 to be elected / 2 à élire)	Xiaoqing Zhao (Memorial) Marlène Frigon (Montréal) Frédéric Gourdeau (Laval)
Ontario (3 to be elected / 3 à élire)	John Toth (McGill) Matthew Davison (Western) Tianxuan Miao (Lakehead) Juris Steprans (York)
West / l'Ouest (3 to be elected / 3 à élire)	Michèle Mosca (Waterloo) Murray Bremner (Saskatchewan) Terry Gannon (Alberta) J. Harley Weston (Regina)
At large / de l'ensemble des membres (1 to be elected / 1 à élire)	Hugh Williams (Calgary) Stan Wagon (Macalester College. Minnesota)

Continuing members
Les membres qui continuent

Here are the members elected in 2001 and continuing on the Board of Directors until June 2005.

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Voici les membres élus en 2001 et qui continués au conseil d'administration jusqu'au juin 2005.

Atlantic / l'Atlantique
Gordon Macdonald (UPEI)
Abraham Punnen (UNBSJ)

Quebec / Québec
Galia Dafini (Concordia)
Thomas Kaczynski (Sherbrooke)

Ontario
Rick Caron (Windsor)
Damien Roy (Ottawa)

West / l'Ouest
Malgorzata Dubiel (SFU)
Ortrud Oellermann (Winnipeg)
Laurent Marcoux (Alberta/Waterloo)

At large / de l'ensemble des membres
Michael Overton (New York)

RESEARCH NOTES

Noriko Yui, Contributing Editor

Invited Lectures at ICM 2002

Three Canadian mathematicians gave invited twenty-minute lectures at the recent International Congress in Beijing.

Kentaro Hori, University of Toronto
Mirror Symmetry and Quantum Geometry
Abstract:
Recently, mirror symmetry has been derived as T-duality applied to gauge systems that flow to non-linear sigma models. We present some of its applications to study quantum geometry involving D-branes. In particular, we show that one can employ D-branes wrapped on torus fibers to reproduce the mirror duality itself, realizing the program of Strominger-Yau-Zaslow in a slightly different context. The Floer theory of intersecting Lagrangians plays an essential role.

Erhard Meinrenken, University of Toronto
Clifford algebras and the Duflo isomorphism
Abstract:
In this talk I described joint work with A. Alekseev (Geneva). We described a certain quantization map for Weil algebras of a quadratic Lie algebra, generalizing both the Duflo map between symmetric and enveloping algebra, and the Chevalley quantization map between exterior and Clifford algebra. In this framework, Duflo's theorem for quadratic Lie algebras extends to a statement in equivariant cohomology.

Bruce Reed, McGill University and CNRS, Paris
List Colouring of Graphs with at Most $(2 - o(1))\chi$ *Vertices*
Abstract:
Ohba has conjectured that if the graph G has $2\chi(G) + 1$ or fewer vertices then the list chromatic number and chromatic number of G are equal. In this paper we prove that this conjecture is asymptotically correct. More precisely we obtain that for any $0 < \varepsilon < 1$, there exist an $n_0 = n_0(\varepsilon)$ such that the list chromatic number of G equals its chromatic number, provided

$$n_0 \leq |V(G)| \leq (2 - \varepsilon)\chi(G).$$

NSERC Leadership Support Initiative for Mathematics

Researchers assuming a leadership role in an active research group can now seek additional funding through the Leadership Support Initiative which was awarded to the mathematics community as part of the 2000-2002 Reallocations Exercise. The Leadership Support Initiative was created in response to the new discipline dynamic in mathematics, in which group-based research is being carried out on a larger scale than ever before.

These highly competitive awards will be distributed through a special, one-time competition that is open to all eligible researchers who are making contributions to the field of mathematics. Applications must be submitted no later than April 15, 2003.

For more information about this initiative, please see the Program News section on NSERC's Web site or contact:
Catherine Podeszfinski (cmp@nserc.ca) - GSC 336, Pure and Applied Mathematics A
or
Jennifer Bean (jxb@nserc.ca) - GSC 337, Pure and Applied Mathematics B.

EDUCATION NOTES

Edward Barbeau, Contributing Editor

Errata in Mathematical Modelling Series

Dick Sutherland of Dalhousie University writes on behalf of the Mathematics and Statistics Committee of APICS, in the Atlantic Provinces. This committee, which meets twice yearly, has a continuing interest in the high school curriculum in the Atlantic Provinces: and in particular has been examining the four textbooks in the "Mathematical Modelling" series. Its criticisms and concerns can be found on the website *http://www.math.mun.ca/∼apics* (click on "Report on the new mathematics curriculum"). More recently, a 42-page document entitled "Errata in the Mathematical Modeling Textbook Series" drafted by Robert Dawson, David Hamilton and Maureen Tingley has appeared; it can be consulted at *http://www.math.unb.ca/∼maureen/High_School_texts.* A brief article on the views of APICS on high school mathematics appeared in the October, 2002 issue of these *Notes*.

Differential equations overview

David A. Sánchez, *Ordinary differential equations: a brief eclectic tour*. Mathematical Association of America. 132 pp., paperbound, 2002. ISBN 0-88385-723-5 (US$28.95)

The dilemma of any teacher is to provide for students enough detail to enable them to get into the subject while avoiding their becoming so overwhelmed as to miss the essence of it. The teacher has to make decisions about the ordering of topics, while the learner is best served often by moving backwards and forwards between the specific and the general. As we move through our careers, our experience at teaching and research helps us to crystallize what is really significant, so that we can resolve this teaching dilemma with greater effectiveness.

The book under review is surely the result of a similar evolution in the author, whose career achievements include the teaching of courses in differential equations to engineers as well as mathematics graduates and undergraduates, and the writing of books and over forty research papers on the topic. This is the book of a seasoned expert. Sanchez directs the book mainly to his fellow instructors, although it can be read with profit by some students with some familiarity with the subject and a desire to cut through layers of special topics to the underlying substance.

As the author remains true to his stated purpose, it is appropriate to quote from the preface:

This is not a textbook, but is instead a collection of approaches and ideas worth considering to gain further insight, of examples or results which bring out or amplify an important topic or behaviour, and an occasional suggested problem. Current textbooks have loads of good problems. This book can be used is several ways:

a. It can serve as a resource or guide in which to browse for the professor who is embarking on teaching an undergraduate course in ordinary differential equations.

b. It could be used as a supplementary text for students who want a deeper understanding of the subject.

c. For a keen student it could serve as a textbook if supplemented by some problems. These could be found in other introductory texts or college outlines (e.g. Schaum's), but more challenging would be for the student to develop his or her own exercises!

Consequently, the book is more conceptual than definitive, and more lighthearted than pedagogic.

A discussion on solvability opens the book, with initial reference to polynomial equations and implicitly defined functions. Since closed solutions of differential equations are generally impossible to obtain, we need theoretical results to provide for existence and uniqueness of solutions, and to understand how families of close solutions cohere. A chapter on first order equations, loaded with examples, highlights the main issues. In particular, there is a fine discussion of the Riccati equation that indicates its significance and shows how usefully it can illustrate escape time, stability and periodicity of solutions.

The third chapter criticizes the emphasis on computation in many courses. With the current availability of software packages, students need only a brief introduction to elementary methods to understand how numerical schemes work along with some practice using graphics. Should students become even moderately familiar with Runge-Kutta methods of order 3 or 4? "Absolutely Not!" thunders the author.

Second order equations suffice to illustrate the situation for equations of higher order than the first. The fourth chapter treats mainly homogeneous and nonhomogeneous linear second order equations. While one route is through the study of equivalent first order systems, the author cautions against making too large a digression into linear algebra, lest the course lose its focus. Some traditional topics such as variation of parameters or stability need to be recast while others, such as numerical methods, boundary value problems and infinite series solutions, ought to be severely pruned or even eliminated. The final chapter gets into qualitative analysis and stability of nonlinear equations. Two sections treat competition and predator-prey systems, and conservative systems.

This volume is one of the *Classroom Resource Materials* series of the M.A.A. Although the purpose of the series is to provide supplementary material for students, this book has more to offer to lecturers and to those who like myself had differential equations as an undergraduate, occasionally had to teach it to undergraduates, and recall it as an attractive area of mathematics. The great strength of this book is the provision of instructive examples going to the core of things that one can enjoy analyzing.

Competition problems in class?

In searching for problems for school students and those training to be teachers, one should not disdain national olympiad competitions. To be sure, one cannot simply pose the problems as stated, but many of them open the door to investigations, group work, illustrations of mathematical power and simplified versions. Let me discuss two problems that were used in recent *Olymon* sets (this is the problems correspondence program for secondary Olympiad aspirants).

The first simply asked for the minimum value of

$$(a-b)^2+(b-c)^2+(c-d)^2+(d-e)^2+(e-f)^2+(f-a)^2,$$

where the letters stood for six distinct integers. Depending on the group, one could pose it for fewer integers, but it could stand as it is, particularly if students are allowed to work together on it. The students could be warmed up by having to evaluate this sum for sextets of their own choice before addressing the minimization problem.

I have found that many students attempt to make the successive differences equal to 1, only to pay a price with the excessively large distance between f and a. The subsequent playing around with examples leads to some appreciation of the role played by the numbers in concert with each other, and it is not unreasonable to expect some to realize that one should increase gradually from a to some intermediate letter and then decrease gradually back to f to keep the overall differences moderate.

One important mathematical procedure that is exemplified by this problem is that of reducing to canonical cases. Here some students realize that since only differences of numbers are involved, one can make the smallest integer equal to 0 or 1 without loss of generality. A little more subtle is to argue that, if we want the sum of squares to be as small as possible, we can assume that the numbers are consecutive, so now it is a matter of looking at permutations of $\{0,1,2,3,4,5\}$. As an add-on to the problem, pupils might be asked to explore, for a given set of six integers, which orders will deliver the largest and smallest possible values of the sum.

This is one of those problems where some students might find it easier to understand what is going on than to write it up, and it is an open question how thoroughly teachers should go into the presentation issue. However, it should certainly be addressed with the more capable students.

The second problem involves a roundrobin tournament (each pair of competitors plays exactly once) involving n teams, for which the ith team has x_i wins and y_i losses, there being no ties. The problem is to show that $\sum x_i^2 = \sum y_i^2$. As Olympiad problems go, this is easy, but the result is interesting and perhaps unexpected.

For a class, one can step it down to four, five or six teams, and have the students explore various scenarios and "discover" this identity for themselves.

There are two main routes to seeing why it works. The first is to simply list all possible win and loss vectors $(x_1, x_2, \cdots, x_n)$ and $(y_1, y_2, \cdots, y_n)$ and check it out; this yields to a reasonable amount of organized canvassing of possibilities for $n \leq 6$, in which students can reflect on some natural restrictions on the entries of these vectors. (For example, it is not possible for two teams to each have no losses.) The second is to actually check it out algebraically, using the key properties that $\sum x_i = \sum y_i$ and $x_i + y_i = n-1$; this can be done with varying degrees of elegance. While the students are playing around, they might consider the type of vectors for which the sum of the squares is as large as possible and as small as possible.

Both of these can fairly be described as "rich learning tasks". This is terminology that is often applied to much weaker broth; it is surely one of the responsibilities of mathematicians to look at the mathematics they come across in whatever context and to ask whether it has possibilities for much lower levels of the educational hierarchy. Classroom teachers cannot be expected to come up with or even initially understand such material, but their expertise is essential in deciding how it might be framed for various groups of students. It is this kind of cross-fertilization that should be our priority to foster.

As we go to the press with this issue, we have received the sad news of the passing of Professor Michael Edelstein (Professor Emeritus at Dalhousie University) on January 27th, 2003 in Vancouver. An obituary will be published in the April issue of the NOTES.

CMS SUMMER MEETING 2003

University of Alberta
Edmonton, Alberta
June 14 - 16, 2003

On behalf of the University of Alberta, the Department of Mathematical and Statistical Sciences invites all researchers, educators and students to the Summer 2003 Meeting of the Canadian Mathematical Society (CMS).

The members of the Department are looking forward to welcoming their colleagues back to Edmonton, a site of previous successful CMS meetings. Following the usual format, the meeting will include a wide variety of symposia, a session of contributed papers, five plenary speakers, as well as the Jeffery-Williams and Krieger-Nelson Prize lecturers. There will also be a Public Lecture delivered by Robert Moody of the University of Alberta.

Most activities and all scientific talks will be held on the campus of the University of Alberta.

The most up-to-date information concerning the programmes, including detailed schedules, will be made available at the meeting web site:

http://www.cms.math.ca/Events/summer03

Meeting registration forms and hotel accommodation forms are also available on the web site, along with on-line forms for registration and submission of abstracts.

Public Lecture

Robert Moody (University of Alberta)

Plenary Speakers

Ingrid Daubechies (Princeton University)
Roland Glowinski (University of Houston)
Gerhard Huisken (Tuebingen/Albert Einstein Institute)
James Lepowsky (Rutgers University)
Dennis Shasha (Courant Institute).

Prizes and Awards

The CMS Jeffery-Williams Lecture will be given by **Ram Murty**, Queen's University.

The CMS Krieger-Nelson Lecture will be given by **Leah Keshet**, University of British Columbia.

Symposia

By invitation of the Meeting Committee, there will be symposia in the following areas. Here is the preliminary list of speakers. If you are interested in being an invited speaker in one of the symposia, it may be possible to do so by contacting one of the organizers of that symposium.

Algebraic and Geometric Topology

(Org: Laura Scull, University of British Columbia, Peter Zvengrowski, University of Calgary, and George Peschke, University of Alberta)

David Blanc (Haifa), Peter Booth (Memorial), Ryan Budney (Rochester), Dan Christiansen (Western Ontario), Ralph Cohen (Stanford), Diarmuid Crowley (Penn State), James Cruickshank (Galway), William Dwyer (Notre Dame), Paul Goerss (Northwestern), John Greenlees (Sheffield), Uwe Kaiser (Idaho State), Igor Kriz (Michigan), Gaunce Lewis (Syracuse), Peter May (Chicago), Andrew Nicas (McMaster), Igor Nikolaev (Calgary), Duane Randall (New Orleans), Doug Ravenel (Rochester), Dale Rolfsen (UBC), Yuly Rudyak (Florida), Parameswaran Sankaran (Chennai), Paul Selick (Toronto), Brooke Shipley (Purdue/UIC), Don Stanley (Ottawa).

Approximation Theory and Applied Harmonic Analysis

(Org: Rong-Qing Jia and Bin Han, University of Alberta)

Len Bos (Calgary), Alex Brudnyi (Calgary), Hanlin Chen (Academy of Sciences), Zeev Ditzian (Alberta), Serge Dubuc (Montreal), Jean Pierre Gabardo (McMaster), Kirill Kopotun (Manitoba), Seng Luan Lee (Singapore), David J. Leeming (Victoria), Daniel Lemire (Academia), Wei Lin (Zhongshan), Jean-Marc Lina (Montreal), Songtao Liu (Alberta), Angelo B. Mingarelli (Carleton), Qun Mo (U. of Alberta), Faramarz Samavati (Calgary), Ivan Selesnick (Polytechnic), Ambikeshwar Sharma (Alberta), Zuowei Shen (Singapore), N. Sivakumar (Texas A & M), Qiyu Sun (Vanderbilt), Remi Vaillancourt (Ottawa), Tony Ware (Calgary), Shu-Zhang Xu (Agere Company), Peicai Xuan (Shaoxing College of Arts and Sciences), Ping Zhou (St. Francis Xavier), Xingwei Zhou (Nankai).

Computational and Analytical Techniques in Modern Applications

(Org: Peter Minev, University of Alberta)

Pavel Bochev (Sandia National Lab), Hermann Brunner (Memorial), Zhiming Chen (Institute of Computational Mathematics), Rustum Choksi (Simon Fraser), Frederico C Furtado (Wyoming), Marina Gavrilova (Calgary), A. Gumel (Manitoba), Sebastien Lacroix (Petroleum Institute of France), Zi-Cai Li (National Sun Yat-sen U.), Dong Liang (York), Bob Russell (Simon Fraser), Manfred Trummer (Simon Fraser), Erik Van Vleck (Colorado School of Mines), Ewa Weinmuller (Vienna U. of Technology), David J. Wollkind (Washington State), Zhimin Zhang (Wayne State), Jun Zou (City U., Hong Kong).

Conformal Field Theory

(Org: Terry Gannon, University of Alberta, and Mark Walton, University of Lethbridge)

B. Campbell (Alberta), C. Cummins (Concordia), T. Gannon (Alberta), C.S. Lam (McGill), J. Lepowsky (Rutgers), P. Mathieu (Laval), J. Rasmussen (CRM), G. Tudose (Minnesota), M. Walton (Lethbridge).

Design Theory and Coding Theory

(Org: John van Rees, University of Manitoba)

K. T. Arasu (Wright State), Al Baartmans (Michigan Technological U.), Frank Bennett (Mount St. Vincent), Iliya Bluskov (Northern British Columbia), Robert Craigen (Manitoba), David Drake (Florida), Hadi Kharaghani (Lethbridge), Don Kreher (Michigan Technological U.), Clement Lam (Concordia), Esther Lamken (Cal Tech), Ben Li (Manitoba), Gary Mullen (Penn State), Ron Mullin (Waterloo/Florida Atlantic), Kevin Phelps (Auburn), Vera Pless (Illinois-Chicago), Rolf Rees (Memorial), Ralph Stanton (Manitoba).

Discrete Mathematics

(Org: Vaclav Linek, University of Winnipeg)

Jason Brown (Dalhousie), Rob Craigen (Manitoba), James Currie (Winnipeg), Terry Gannon (Alberta), David Jackson (Waterloo), Steve Kirkland (Regina), Eric Moorehouse (Wyoming), Terry Visentin (Winnipeg).

Dynamical Systems

(Org: Michael A. Radin, Rochester Institute of Technology)

Bhagwan Aggarwala (Calgary), William Basener (RIT), Bernard Brooks (RIT), Monica Gabriela Cojocaru (Queen's), John E. Franke (North Carolina State), Abba Gummel (Manitoba), Harold M. Hastings (Hofstra), Candace M. Kent (Virginia Commonwealth), Witold Kosmala (Appalachian State), Herbert Kunze (Guelph), Michael A. Radin (RIT), Christiane Rousseau (Montréal), Mario Roy (Concordia), Hassan Sedaghat (Virginia Commonwealth), Abdul - Aziz Yakubu (Howard).

Industrial Mathematics

(Org: Biao Huang, Yanping Lin and Shijie Liu, University of Alberta)

Jinwen Chen (NCUT), Xiaodong Duan (Dalian Nationalities U.), J. Fraser Forbes (Alberta), Robert Hayes (Alberta), Biao Huang (Alberta), Shijie Liu (Alberta), Xiaodong Liu (Dalian Maritime U.), Yiyong Nie (Shenyang Insitute of Automation), Zbigniew Ring (NCUT), Edgar Tamayo (Syncrude Canada Ltd.), Andrew Willis (Syncrude Canada Ltd.), Jason Zhang (New Brunswick), Q. L. Zhang (Northeastern).

Infinite Dimensional Dynamical Systems

(Org: Xiaoqiang Zhao, Memorial University of Newfoundland, and Thomas Hillen, University of Alberta)

Bjorn Birnir (California -Santa Barbara), Steve Cantrell (Miami), Yuming Chen (Wilfrid Laurier), O. Diekmann (Utrecht), Yihong Du (New England), Teresa Faria (Lisbon), Marek Fila (Comenius), K.P. Hadeler (Tuebingen), Yu Huang (Zhongshan), Yang Kuang (Arizona State), Mark Lewis (Alberta), Julian Lopez-Gomez (Complutense Madrid), Mary Pugh (Toronto), Shigui Ruan (Miami), Wenxian Shen (Auburn), Brian Sleeman (Leeds), Moxun Tang (Michigan State), Horst Thieme (Arizona State), Jianhong Wu (York), Shengfan Zhou (Shanghai), Xingfu Zou (Memorial).

Mathematical and Computational Finance

(Org: Tahir Choulli and Jie Xiong, University of Alberta)

Abel Cadenillas (Alberta), Jacques Carriere (Alberta), Daniel Dufresne (Montreal), Shui Feng (McMaster), Yaozhong Hu (Kansas), Bob Kimmel (Princeton), Ali Lazrak (British Columbia), Yoonjung Lee (Wisconsin-Madison), Pat Muldowney (Ulster), Bruno Remillard (HEC, Montreal), Tom Salisbury (York/Toronto), Alexander Schied (British Columbia), Louis Seco (Toronto), Michael Taksar (Missouri), Ruppa Thulasiram (Manitoba), Hao Wang (Oregon), Lixin Wu (Claremont Graduate U.), Jiongmin Yong (Fudan U. Shanghai), Yong Zeng (Wisconsin-Madison), Xinqui Zhao (Alberta), Xunyu Zhou (Chinese U. of Hong Kong).

New and Successful Courses and Programmes in Mathematics

(Org: Ted Lewis, University of Alberta)

Sharon Friesen (Galileo Education Network Association), Henryk Kolacz (Alberta), Indy Lagu (Mount Royal College), Andy Liu (Alberta), Mike Long (TIGERS, West Virginia), Bill Ralph (Brock), James Stewart (Toronto), Stuart Wachowicz (Edmonton Public School Board).

Physics and Geometry

(Org: Maung Min-Oo, McMaster University, and Eric Woolgar, University of Alberta)

M.T. Anderson (SUNY Stony Brook), G.J. Galloway (Miami), J. Gegenberg (New Brunswick), C.R. Graham (Washington), M. Herzlich (Montpellier), G. Huisken (AEI), J. Isenberg (Oregon), D. Page (Alberta), S. Surya (Alberta), X. Wang (MIT).

Real Analysis
(Org: Erik Talvila, University of Alberta)

J. Coffey (Purdue U. Calumet), T.Y. Lee (Singapore), P.A. Loeb (Illinois), P. Musial (Richard J. Daley), R. Vallin (Slippery Rock), S. Wang (Okanagan), W. Zachary (Howard).

Contributed Papers Session
(Org: to be announced)

Contributed papers of 15 minutes duration are invited. Abstracts for CMS contributed papers should be prepared as specified below. For an abstract to be eligible, the abstract must be received **before April 15, 2003**. The abstract must be accompanied by its contributor's registration form and payment of the appropriate fees.

To better assist organizers, please include the Primary (2000) AMS Classification (http://www.ams.org/msc/).

Travel Grants for Graduate Students

Limited funds are available to partially fund the travel and accommodation costs for graduate students. For more information, please contact the Meeting Committee at gradtravel-s03@cms.math.ca.

Applicants must be bona fide graduate students, at a Canadian or other University. To apply for this funding, please have a letter written by your Supervisor or departmental Graduate Advisor, briefly answering the following: Name of Student, Area of study and level, How will the student benefit from the meeting? Will the student be speaking? What support is available from local sources or grants, for this student?

Please have this sent **before May 1, 2003**. This letter may be emailed to gradtravel-s03@cms.math.ca. Applicants will be notified early in May of the funding decision.

If successful, the student will receive a cheque for reimbursement of expenses upon completion and submission of the standard Travel Expense Claim Form, along with appropriate original receipts.

Related Activities

2003 Project NExTMAC National Workshop

A 1 or 2-day professional development workshop for junior mathematics and statistics faculty is being planned to take place immediately prior to the 2003 CMS Summer Meeting. The workshop will take place at the University of Alberta. As details of the workshop sessions and related events become finalized, they will be made available online at *http://www.math.mun.ca/∼nextmac/*

This annual workshop is the central component of Project NExTMAC (New Experiences in Teaching Mathematics Across Canada), the primary goal of which is to provide junior mathematics and statistics faculty, many of whom do not have a wealth of teaching experience, with information and resources that will enable them to become better and more effective teachers of mathematics and/or statistics. In addition to sessions that focus on pedagogical issues related to teaching mathematics and statistics at the university level, the workshop aims to provide a setting in which junior faculty can freely share their ideas and concerns with a group of peers.

Since activities and responsibilities that are not directly tied to teaching can have profound effects on teaching effectiveness, we also plan to address other issues that impact on the overall success and well-being of junior faculty. These can include avoiding taking on too many academic service commitments, struggling to establish and maintain a research program, coping with academic politics, protecting one's personal time from being overwhelmed by professional duties, and other issues that junior faculty face as they make the adjustment from being graduate students to being university faculty.

To register for the workshop, mark the "NExTMAC Workshop" item in the "Related Events" section of the CMS Meeting registration form. For those who register for the CMS Meeting, there will be no workshop registration fee. For those who wish to attend only the workshop (and not the CMS Meeting), complete the CMS Meeting registration form and pay the special "NExTMAC Only" fee.

Conference for Women Graduate Students in Mathematics

This special conference is being organized by Malgorzata Dubiel, Simon Fraser University, and will be held June 12-13, 2003 at the University of Alberta. More detailed information will be published as it becomes available.

Social Events

A welcoming reception will be held Friday, June 13, from 7:00 to 9:00 p.m. (location to be announced).

A Public Lecture Reception will be held in connection with the talk by Robert Moody (Alberta). More details will be posted on our web site as they become available.

The Delegates' Luncheon will be held on Saturday, June 14, from 12:30 to 2:00 p.m. (location to be announced). A ticket to this luncheon is included in all registration fee categories.

A banquet is planned for the meeting. More details will be posted on our web site as they become available.

Coffee and juice will be available during the scheduled breaks.

A detailed schedule of all social and other events is available from the schedule page of the meeting web site.

Business Meetings

The CMS will be holding business meetings during the course of the meeting.

A detailed schedule of business meetings and other events is available from the schedule page of the meeting web site.

Exhibits

Exhibits will be held during hours specified in the meeting schedule.

Submission of Abstracts

Abstracts for all talks will be published in the meeting programme and will also be available on-line.

Abstracts may be sent electronically, following instructions given below. Electronic submission of abstracts is preferred. If this is not possible, abstracts may also be prepared on the standard form available from the CMS Executive Office, 577 King Edward, Suite 109, Ottawa, Ontario CANADA K1N 6N5.

Speakers are asked to submit their abstracts as soon as possible. The deadline for submission of abstracts has been set at April 15, 2003. The organizers appreciate the cooperation of all the speakers in observing this important deadline.

Electronic submission of abstracts: To submit your abstract, please go to the forms section of the meeting web site.

Alternatively, files including the session, speaker's name, affiliation, complete address, title of talk, and abstracts may be sent to

abstracts-s03@cms.math.ca (speakers), or
cp-abstracts-s03@cms.math.ca (contributed papers).

Please make sure to include the session name in your subject line. For contributed papers, to better assist organizers, please include the 2000 AMS Subject Classification (http://www.ams.org/msc/).

Important deadline for submission of all abstracts: April 15, 2003

Registration

The registration form is available from:

CMS Executive Office
577 King Edward, Suite 109, P.O. Box 450, Station A
Ottawa, Ontario CANADA K1N 6N5
Tel: 613-562-5702 FAX: 613-565-1539
Email: meetings@cms.math.ca
Electronic pre-registration is also available at:

http://www.cms.math.ca/Events/summer03

Payment for preregistration may be made by cheque, or by VISA or MasterCard. Although registration fees are given in Canadian dollars, delegates may send cheques in US dollars by contacting their financial institution for the current exchange rate.

Please note that payment must be RECEIVED IN OTTAWA on or before May 1 in order to qualify for reduced rates. In order for your payment to be processed before the meeting, it should be received by May 31.

	Before May 1	**After May 1**
Delegate's Luncheon included		
Plenary speakers/prize lecturers	$0	$0
Session speakers	215	215
Organizers	145	145
Non-members	430	560
CMS/AMS/MAA members with grants	290	375
CMS/AMS/MAA members without grants	145	190
One-day fee	195	255
Postdocs, retired	110	145
Teachers (K-12, CEGEP), students, unemployed	55	70
NExTMAC WORKSHOP ONLY	55	55
Banquet (free for plenary/prize speakers)	50	50

CMS = Canadian Mathematical Society
AMS = American Mathematical Society
MAA = Mathematical Association of America

Why Preregister?

Wondering whether to pre-register or wait until you arrive? Here are some advantages to pre-registering. – many can take advantage of reduced fees until the early registration deadline (see above)
– your name would appear on the list of participants on our web site
– your Meeting Kit will be waiting for you at the reception on Friday evening
– no waiting in line early Saturday morning to process your registration!
– banquet tickets are available now but may no longer be available on site
For all these reasons, we encourage you to preregister, whether it be before or after the early registration deadline. If you'd like to preregister and enjoy the above benefits, please use our online forms.

Refund Policy

Delegates wishing to cancel their registration must notify the CMS Executive Office in writing before May 31 to receive a refund less a $40 processing fee. Those whose contributed paper has not been accepted will upon request be fully refunded.

Do you qualify for free CMS membership?

An AMS or a MAA member who registers at a semi-annual meeting of the CMS and who is not a member of the CMS, is eligible for a one-time only, one-year free membership in the CMS.

If you qualify, please visit the CMS booth to complete a membership application form. Please provide proof of current AMS or MAA membership. This offer applies to new members only.

Accommodation

It is recommended that those attending the conference book early to avoid disappointment. Blocks of rooms have been reserved at the locations given below and will be held until the deadlines specified. Reservations not made by that date will be on a space available basis. Rates are per room, per night and are quoted in Canadian dollars.

Crowne Plaza Chateau Lacombe
10111 Bellamy Hill, Edmonton (Alberta) Canada T5J 1N7
Location: Connected to campus by LRT train, 4 stops.
Check-in: 1:00 p.m.; Check-out: 1:00 p.m.
Applicable taxes: GST (7%), Hotel tax (5%)
Deadline: May 11, 2003
Group Code: CMS 2003
Phone: 780-428-6611 toll-free: 800-661-8801
FAX: 780-425-6564
parking: $7.50 daily (self-parking), valet parking also available

Rates: $85, single/double occupancy (1 bed)
$85, twin occupancy (2 beds)
$129, Club Executive Level
$149, Studio Suite
$199, Executive Suite

Varscona Hotel
8206 - 106 Street, Edmonton (Alberta) Canada T6E 6R9
Location: 20 minutes walk from campus
Check-in: 3:00 p.m.; Check-out: 12:00 noon
Applicable taxes: GST (7%), Hotel tax (5%)
Deadline: May 11, 2003
Group Code: GMAT or 1008
Phone: 780-434-6111 Toll-free: 1-888-515-3355
FAX: 780-439-1195
email: reservations@varscona.com
parking: complimentary self-parking (valet parking also available)

Rates: $110, single or double (2 people) occupancy
$20 per additional person (12 years and older)
to a maximum of 4 people per room

Tower on the Park
9715 - 110 Street, Edmonton (Alberta) Canada T5K 2M1
Location: Connected to campus by LRT train, 1 stop,
or 20 minute walk
Check-in: 4:00 p.m.; Check-out: 12:00 noon
Applicable taxes: GST (7%), Hotel tax (5%)
Deadline: May 11, 2003
Group Code: 856
Phone: 780-488-1626
FAX: 780-488-0659
email: rgreen@toweronthepark.com
parking: complimentary self-parking

Rates: $69, single/double occupancy (1 bed)
$89, single/double occupancy (2 bedrooms)

Campus Tower Suite Hotel
11145 - 87 Avenue, Edmonton (Alberta) Canada T6G 0Y1
Location: on campus
Check-in: 3:00 p.m.; Check-out: 12:00 noon
Applicable taxes: GST (7%), Hotel tax (5%)
Deadline: May 11, 2003
Group Code: CMS 2003 or Leader Number 69940
Phone: 780-439-6060 Toll-free: 1-800-661-6562
FAX: 780-433-4410
website: www.campustower.com
parking: complimentary self-parking

Rates: $89, single or double (2 people) occupancy)
$20 per additional person (19 years and older)
to a maximum of 4 people per room

University of Alberta Residences
44 Lister Hall, 87 Avenue at 116 Street, Edmonton (Alberta)
Check-in: after 3:00 p.m.; Check-out: 11:00 a.m.
Applicable taxes: GST (7%), Hotel tax (5%) - included in daily rate
Deadline: May 11, 2003
Group Code: CMS (or Canadian Mathematical Society)
Phone: 1-780-492-4281, ask for guest services
Toll-free: 1-800-615-4807 in Canada
FAX: 1-780-492-7032
website: www.hfs.ualberta.ca
parking: permits available at front desk, $4/day

Rates: $33.60, single, $44.80 twin
breakfast on cash basis, parking not included

In all cases, delegates must make their own reservations. The conference rate is usually extended up to two days pre- and post-convention. PLEASE QUOTE THE GROUP CODE WHERE AVAILABLE.

Accommodation reservations and cancellations: In all cases, all reservations must be guaranteed by a first night deposit, or major credit card guarantee.

For the Crowne Plaza Chateau Lacombe, reservations will be held until 6:00 p.m. on the day of arrival. In the case of a "no show" or if a guaranteed reservation is not cancelled by 6:00 p.m. on the day of arrival, the cost of the room for the first night will be charged to the guarantor. NOTE: At the time of check-in on the day of arrival, all guests will be asked to verify their departure date. At that time, any necessary changes can be made without penalty. If the guest chooses to depart prior to this date, they will be assessed a fee of $25.00 per day against their credit card. Emergency situations will of course be taken into consideration.

For the Varscona Hotel, reservations will be held until 4:00 p.m. on the day of arrival. In the case of a "no show" or if a guaranteed reservation is not cancelled by 4:00 p.m. on the day of arrival, the cost of the room for the first night will be charged to the guarantor.

For the Tower on the Park, reservations will be held until 4:00 p.m. on the day of arrival. In the case of a "no show" or if a guaranteed reservation is not cancelled by 4:00 p.m. on the day PRIOR to the date of arrival, the cost of the room for the first night will be charged to the guarantor.

For the Campus Tower Suite Hotel, reservations will be held until 6:00 p.m. on the day of arrival. In the case of a "no show" or if a guaranteed reservation is not cancelled by 6:00 p.m. on the day PRIOR to the date of arrival, the cost of the room for the first night will be charged to the guarantor.

For the University of Alberta Residences, 48 hours cancellation notice is required to avoid charges. In the case of a "no show" or if a guaranteed reservation is not cancelled 48 hrs prior to expected arrival, the cost of the room for the first night will be charged to the guarantor.

Child Care

Information regarding available child care may be provided by the meeting hotels. Advance research and arrangements are recommended.

Please contact the hotels directly to make enquiries.

Additional information will be posted to the meeting web site as it becomes available.

Travel

The City of Edmonton: Detailed information regarding the University of Alberta and the City of Edmonton, including tourism information, local weather and climate, car rental information, site and street maps, and suggested One Day Itineraries for self-guided tours, are available at the following web sites:

http://www.math.ualberta.ca/
http://www.edmonton.com/
http://weatheroffice.ec.gc.ca/canada_e.html

Parking: Guests at the Crowne Plaza may park for a daily fee of $7.50 (including GST). Valet parking is also available.

Information regarding parking at other hotels will be posted shortly.

Acknowledgements

Support from the following is gratefully acknowledged:
– University of Alberta, Department of Mathematical and Statistical Sciences
– University of Alberta Conference Fund
– University of Alberta Faculty of Science
– University of Alberta Theoretical Physics Institute
– University of Alberta Applied Mathematics Institute
– University of British Columbia Faculty of Science
– University of British Columbia Mathematics Department
– Perimeter Institute for Theoretical Physics
– Canadian Institute for Theoretical Astrophysics
– Nelson, A Thomson Company
– The National Programme Committee (a joint funding body of the Centre de recherches mathématiques, The Fields Institute for Research in Mathematical Sciences, and The Pacific Institute for the Mathematical Sciences)
The Canadian Mathematical Society would like to acknowledge the contribution of the members of the Meeting Committee for organizing this meeting.

Meeting Committee

Programme
Meeting Director : YanPing Lin (Alberta)
T. Choulli (Alberta) Terry Gannon (Alberta) Bin Han (Alberta) Thomas Hillen (Alberta) B. Huang (Alberta) RongQing Jia (Alberta) Y. Lin (Alberta) Vazz Linek (Winnipeg) S. Liu (Alberta) Ted Lewis (Alberta) Peter Minev (Alberta) Maung Min-Oo (McMaster) Michael A. Radin (Rochester Institute of Technology) Erik Talvila (Alberta) John van Rees (Manitoba) Tony Ware (Calgary) Eric Woolgar (Alberta) Mark Walton (Lethbridge) Graham Wright (CMS ex-officio) XiaoQiang Zhao (Memorial).

Local Arrangements
Chair : Eric Woolgar (Alberta)
Monique Bouchard (CMS ex-officio).

CMS MEETINGS / RÉUNIONS DE LA SMC

The most up-to-date information concerning the programmes, including detailed schedules, will be made available at the meeting web site:

http://www.cms.math.ca/Events/summer03

Meeting registration forms and hotel accommodation forms are also available on the web site, along with online forms for registration and submission of abstracts.

Vous trouverez l'information la plus récente sur les programmes, y compris les horaires, sur le site Web suivant:

http://www.cms.math.ca/Reunions/ete03

Vous trouverez les formulaires d'inscription et de réservation d'hôtel sur notre site Web, tout comme les formulaires électroniques d'inscription et de présentation des résumés.

RÉUNION D'ÉTÉ 2003 DE LA SMC

Université de l'Alberta
Edmonton (Alberta)
du 14 au 16 juin 2003

Au nom de l'Université de l'Alberta, le Département des sciences mathématiques et statistiques souhaite cordialement la bienvenue à tous les participants à la Réunion d'été 2003 de la Société mathématique du Canada (SMC).

Les membres du département sont heureux de recevoir encore une fois les participants au lieu de plusieurs réunions précédentes de la SMC. Conformément au format habituel, la Réunion comprendra de nombreux symposiums, des communications libres, cinq conférences principales ainsi que les conférences des lauréats des prix Jeffery-Williams et de Krieger-Nelson. De plus, une conférence populaire sera donnée par Robert Moody de l'Université de l'Alberta.

Toutes les activités au programme scientifique se dérouleront sur le campus de l'Université de l'Alberta.

Vous trouverez l'information la plus récente sur les programmes, y compris les horaires, sur le site Web suivant:

http://www.cms.math.ca/Reunions/ete03

Vous trouverez les formulaires d'inscription et de réservation d'hôtel sur notre site Web, tout comme les formulaires électroniques d'inscription et de présentation des résumés.

Conférence populaire

Robert Moody (Université de l'Alberta).

Conférenciers principaux

Ingrid Daubechies (Université Princeton)
Roland Glowinski (Université de Houston)
Gerhard Huisken (Tuebingen/Institut Albert Einstein)
James Lepowsky (Université Rutgers)
Dennis Shasha (Institut Courant).

Prix

La conférence Jeffery-Williams de la SMC sera donnée par **Ram Murty**, de l'Université Queen's.

La conférence Krieger-Nelson de la SMC sera donnée par **Leah Keshet**, de Université de la Colombie-Britannique.

Symposiums

Le Comité de coordination a organisé des symposiums sur les thèmes qui suivent. Voici la liste préliminaire des conférenciers. Si on est intéressé à faire un exposé comme conférencier invité dans l'un des symposiums, on peut en faire la demande auprès des organisateurs de ce symposium.

Algèbre et Topologie géométrique

(Org: Laura Scull, Université de la Colombie-Britannique, Peter Zvengrowski, Université de Calgary, and George Peschke, Université de l'Alberta)

David Blanc (Haifa), Peter Booth (Memorial), Ryan Budney (Rochester), Dan Christiansen (Western Ontario), Ralph Cohen (Stanford), Diarmuid Crowley (Penn State), James Cruickshank (Galway), William Dwyer (Notre Dame), Paul Goerss (Northwestern), John Greenlees (Sheffield), Uwe Kaiser (Idaho State), Igor Kriz (Michigan), Gaunce Lewis (Syracuse), Peter May (Chicago), Andrew Nicas (McMaster), Igor Nikolaev (Calgary), Duane Randall (New Orleans), Doug Ravenel (Rochester), Dale Rolfsen (UBC), Yuly Rudyak (Florida), Parameswaran Sankaran (Chennai), Paul Selick (Toronto), Brooke Shipley (Purdue/UIC), Don Stanley (Ottawa).

Analyse harmonique appliquée

(Org: Rong-Qing Jia et Bin Han, Université de l'Alberta)

Len Bos (Calgary), Alex Brudnyi (Calgary), Hanlin Chen (Academy of Sciences), Zeev Ditzian (Alberta), Serge Dubuc (Montreal), Jean Pierre Gabardo (McMaster), Kirill Kopotun (Manitoba), Seng Luan Lee (Singapore), David J. Leeming (Victoria), Daniel Lemire (Academia), Wei Lin (Zhongshan), Jean-Marc Lina (Montreal), Songtao Liu (Alberta), Angelo B. Mingarelli (Carleton), Qun Mo (Alberta), Faramarz Samavati (Calgary), Ivan Selesnick (Polytechnic), Ambikeshwar Sharma (Alberta), Zuowei Shen (Singapore), N. Sivakumar (Texas A & M), Qiyu Sun (Vanderbilt), Remi Vaillancourt (Ottawa), Tony Ware (Calgary), Shu-Zhang Xu (Agere Company), Peicai Xuan (Shaoxing College of Arts and Sciences), Ping Zhou (St. Francis Xavier), Xingwei Zhou (Nankai).

Techniques numériques et analytiques dans les applications modernes

(Org: Peter Minev, Université de l'Alberta)

Pavel Bochev (Sandia National Lab), Hermann Brunner (Memorial), Zhiming Chen (Institute of Computational Mathematics), Rustum Choksi (Simon Fraser), Frederico C Furtado (Wyoming), Marina Gavrilova (Calgary), A. Gumel (Manitoba), Sebastien Lacroix (Petroleum Institute of France), Zi-Cai Li (National Sun Yat-sen U.), Dong Liang (York), Bob Russell (Simon Fraser), Manfred Trummer (Simon Fraser), Erik Van Vleck (Colorado School of Mines), Ewa Weinmuller (Vienna U. of Technology), David J. Wollkind (Washington State), Zhimin Zhang (Wayne State), Jun Zou (City U., Hong Kong).

Théorie des champs conformes

(Org: Terry Gannon, Université de l'Alberta, et Mark Walton, Université de Lethbridge)

B. Campbell (Alberta), C. Cummins (Concordia), T. Gannon (Alberta), C.S. Lam (McGill), J. Lepowsky (Rutgers), P. Mathieu (Laval), J. Rasmussen (CRM), G. Tudose (Minnesota), M. Walton (Lethbridge).

Combinatoire, Théorie du désign, Théorie des codes

(Org: John van Rees, Université du Manitoba)

K. T. Arasu (Wright State), Al Baartmans (Michigan Technological U.), Frank Bennett (Mount St. Vincent), Iliya Bluskov (Northern British Columbia), Robert Craigen (Manitoba), David Drake (Florida), Hadi Kharaghani (Lethbridge), Don Kreher (Michigan Technological U.), Clement Lam (Concordia), Esther Lamken (Cal Tech), Ben Li (Manitoba), Gary Mullen (Penn State), Ron Mullin (Waterloo/Florida Atlantic), Kevin Phelps (Auburn), Vera Pless (Illinois-Chicago), Rolf Rees (Memorial), Ralph Stanton (Manitoba).

Mathématiques discrètes

(Org: Vaclav Linek, Université de Winnipeg)

Jason Brown (Dalhousie), Rob Craigen (Manitoba), James Currie (Winnipeg), Terry Gannon (Alberta), David Jackson (Waterloo), Steve Kirkland (Regina), Eric Moorehouse (Wyoming), Terry Visentin (Winnipeg).

Systèmes dynamiques

(Org: Michael A. Radin, Rochester Institute of Technology)

Bhagwan Aggarwala (Calgary), William Basener (RIT), Bernard Brooks (RIT), Monica Gabriela Cojocaru (Queen's), John E. Franke (North Carolina State), Abba Gummel (Manitoba), Harold M. Hastings (Hofstra), Candace M. Kent (Virginia Commonwealth), Witold Kosmala (Appalachian State), Herbert Kunze (Guelph), Michael A. Radin (RIT), Christiane Rousseau (Montréal), Mario Roy (Concordia), Hassan Sedaghat (Virginia Commonwealth), Abdul - Aziz Yakubu (Howard).

Mathématiques industrielles

(Org: Biao Huang, Yanping Lin et Shijie Liu, Université de l'Alberta)

Jinwen Chen (NCUT), Xiaodong Duan (Dalian Nationalities U.), J. Fraser Forbes (Alberta), Robert Hayes (Alberta), Biao Huang (Alberta), Shijie Liu (Alberta), Xiaodong Liu (Dalian Maritime U.), Yiyong Nie (Shenyang Insitute of Automation), Zbigniew Ring (NCUT), Edgar Tamayo (Syncrude Canada Ltd.), Andrew Willis (Syncrude Canada Ltd.), Jason Zhang (New Brunswick), Q. L. Zhang (Northeastern).

Systèmes dynamiques en dimensions infinies

(Org: Xiaoqiang Zhao, Université Memorial de Terre-Neuve, et Thomas Hillen, Université de l'Alberta)

Bjorn Birnir (California -Santa Barbara), Steve Cantrell (Miami), Yuming Chen (Wilfrid Laurier), O. Diekmann (Utrecht), Yihong Du (New England), Teresa Faria (Lisbon), Marek Fila (Comenius), K.P. Hadeler (Tuebingen), Yu Huang (Zhongshan), Yang Kuang (Arizona State), Mark Lewis (Alberta), Julian Lopez-Gomez (Complutense Madrid), Mary Pugh (Toronto), Shigui Ruan (Miami), Wenxian Shen (Auburn), Brian Sleeman (Leeds), Moxun Tang (Michigan State), Horst Thieme (Arizona State), Jianhong Wu (York), Shengfan Zhou (Shanghai), Xingfu Zou (Memorial).

L'analyse numérique dans les mathématiques financières

(Org: Tahir Choulli and Jie Xiong, Université de l'Alberta)

Abel Cadenillas (Alberta), Jacques Carriere (Alberta), Daniel Dufresne (Montreal), Shui Feng (McMaster), Yaozhong Hu (Kansas), Bob Kimmel (Princeton), Ali Lazrak (British Columbia), Yoonjung Lee (Wisconsin-Madison), Pat Muldowney (Ulster), Bruno Remillard (HEC, Montreal), Tom Salisbury (York/Toronto), Alexander Schied (British Columbia), Louis Seco (Toronto), Michael Taksar (Missouri), Ruppa Thulasiram (Manitoba), Hao Wang (Oregon), Lixin Wu (Claremont Graduate U.), Jiongmin Yong (Fudan U. Shanghai), Yong Zeng (Wisconsin-Madison), Xinqui Zhao (Alberta), Xunyu Zhou (Chinese U. of Hong Kong).

Nouveaux programmes de mathématiques et programmes à succès

(Org: Ted Lewis, Université de l'Alberta)

Sharon Friesen (Galileo Education Network Association), Henryk Kolacz (Alberta), Indy Lagu (Mount Royal College), Andy Liu (Alberta), Mike Long (TIGERS, West Virginia), Bill Ralph (Brock), James Stewart (Toronto), Stuart Wachowicz (Edmonton Public School Board).

Géométrie et physique

(Org: Maung Min-Oo, Université McMaster, et Eric Woolgar, Université de l'Alberta)

M.T. Anderson (SUNY Stony Brook), G.J. Galloway (Miami), J. Gegenberg (New Brunswick), C.R. Graham (Washington), M. Herzlich (Montpellier), G. Huisken (AEI), J. Isenberg (Oregon), D. Page (Alberta), S. Surya (Alberta), X. Wang (MIT).

Analyse Réel

(Org: Erik Talvila, Université de l'Alberta)

J. Coffey (Purdue U. Calumet), T.Y. Lee (Singapore), P.A. Loeb (Illinois), P. Musial (Richard J. Daley), R. Vallin (Slippery Rock), S. Wang (Okanagan), W. Zachary (Howard).

Communications libres

(Org: à confirmer)

Nous lançons un appel de communications libres de 15 minutes chacune. Les résumés devront respecter les critères précisés ci-dessous et nous parvenir **au plus tard le 15 avril 2003**. Nous demandons à chacun de joindre au résumé le formulaire d'inscription et le règlement des frais pertinents.

Pour les communications libres, veuillez indiquer la classification de sujet AMS 2000 (veuillez consulter http://www.ams.org/msc/).

Subventions pour étudiants diplômés

Les étudiants diplômés ont accès à un fonds limité pour financer une partie de leurs frais de déplacement et de séjour. Pour de plus amples renseignements, veuillez communiquer avec le Comité de coordination à l'adresse suivante : subventions-e03@smc.math.ca.

Les demandeurs doivent être des étudiants de deuxième ou de troisième cycle inscrits dans une université canadienne ou étrangère. Toute demande de financement doit être accompagnée d'une lettre du superviseur de l'étudiant ou de la personne responsable des études supérieures de son département, dans laquelle il ou elle indiquera le nom de l'étudiant, son domaine et son niveau d'études, en quoi la Réunion sera profitable à l'étudiant, si l'étudiant présentera une communication et si l'étudiant a accès à d'autres sources de financement de son université (bourses, subventions, etc.).

Cette lettre doit parvenir à la SMC avant le 1er mai 2003 et peut être envoyée par courriel (subventions-e03@smc.math.ca). Les décisions seront annoncées au début de mai.

Si une subvention est accordée à l'étudiant, ce dernier se verra rembourser ses dépenses sur présentation du formulaire de remboursement approprié accompagné des reçus originaux.

Activités connexes

Atelier national annuel NExTMAC 2003

On prépare en ce moment la tenue d'un atelier de perfectionnement d'un jour ou deux destiné particulièrement aux professeurs de mathématiques ou de statistique en début de carrière universitaire. L'atelier se déroulera juste avant la Réunion d'été 2003 de la SMC, à l'Université de l'Alberta. Dès que les détails seront finalisés, nous publierons les renseignements concernant les séances et les activités connexes au www.math.mun.ca/∼nextmac.

Cet atelier annuel est la composante centrale du projet NExTMAC (New Experiences in Teaching Mathematics Across Canada), dont l'objectif principal consiste à fournir de l'information et des ressources aux nouveaux professeurs, qui souvent ne possèdent pas une vaste expérience d'enseignement, pour les aider à mieux enseigner les mathématiques et la statistique, et de manière plus efficace. En plus de comprendre des séances de perfectionnement en enseignement des mathématiques et de la statistique à l'université, l'atelier permettra aux nouveaux professeurs de discuter librement de leurs idées et de leurs difficultés avec un groupe de collègues.

Comme les activités et les responsabilités qui ne sont pas directement liées à l'enseignement ont parfois des conséquences considérables sur l'efficacité de l'enseignement, nous prévoyons aussi aborder dans le cadre de cet atelier des sujets qui ont une influence sur la réussite globale et le bien-être général des jeunes professeurs. Quelques exemples : le risque d'accepter un trop grand nombre d'engagements professionnels; la difficulté de bâtir et de suivre un programme de recherche; composer avec la politique universitaire; apprendre à protéger sa vie personnelle de trop nombreuses obligations professionnelles, et autres obstacles que les nouveaux membres du corps professoral doivent surmonter lorsqu'ils passent du statut d'étudiant à celui de professeur d'université.

Pour s'inscrire, il suffit d'aller au point ≪Atelier NexTMAC≫ de la section ≪Activités connexes≫ du formulaire d'inscription à la Réunion de la SMC. Les personnes qui s'inscrivent à la Réunion de la SMC pourront assister gratuitement à l'atelier. Pour assister à l'atelier seulement (et non à la Réunion), remplir le formulaire d'inscription à la Réunion et ne payer que les frais spéciaux de l'Atelier NExTMAC.

Conférence pour étudiantes graduées en mathématiques

Cette conférence est organisé par Malgorzata Dubiel, l'Université de Simon Fraser et aura lieu les 12 et 13 juin. Nous publierons tout nouveau renseignement sur le site Web dès que possible.

Activités sociales

Une réception aura lieu le vendredi 13 juin, de 19 h à 21 h (lieu à confirmer).

Une réception pour la conférence populaire aura lieu avant la conférence de Robert Moody (Alberta). Nous publierons tout nouveau renseignement sur le site Web dès que nous le recevrons.

Le lunch des participants se tiendra le samedi 14 juin, de 12 h 30 à 14 h, (lieu à confirmer). Ce repas est compris dans toutes les catégories d'inscription.

Un banquet est planifié. Nous publierons tout nouveau renseignement sur le site Web dès que nous le recevrons.

Du café et des jus seront servis pendant les pauses.

Un horaire détaillé de toutes les activités sociales et des autres événements est disponible à la page des horaires du site Web.

Séances de travail

La SMC organisera des séances de travail à l'occasion de cette Réunion.

Un horaire détaillé des séances de travail et des autres événements est disponible à la page des horaires du site Web.

Expositions

Les kiosques d'exposition seront ouverts aux heures indiquées dans l'horaire de la Réunion.

Envoi des résumés

Tous les résumés paraîtront dans le programme de la Réunion et seront accessibles sur le site Web.

Les participants peuvent envoyer leur résumé sous forme électronique en suivant les instructions ci-dessous. Il est préférable de remettre les résumés par voie électronique, mais si ce n'est pas possible, vous pouvez utiliser le formulaire standard que vous pourrez vous procurer au Bureau administratif de la SMC, 577, avenue King-Edward, bureau 109, Ottawa (Ontario) Canada K1N 6N5.

Les conférenciers sont priés de remettre leur résumé le plus tôt possible. La date limite est fixée au 15 avril 2003. Les organisateurs remercient les conférenciers de bien vouloir respecter cette importante échéance.

Envoi électronique des résumés : Pour envoyer votre résumé, rendez-vous à la section des formulaires du site Web de la Réunion.

Vous pouvez aussi nous faire parvenir par courriel un fichier comprenant le nom de la séance, le nom du conférencier, son affiliation, son adresse complète, le titre de la conférence et le résumé à l'une des adresses suivantes :
resumes-e03@smc.math.ca (conférenciers invités), ou
cl-resumes-e03@smc.math.ca (communications libres).

N'oubliez pas de préciser le nom de la séance dans le sujet de votre message. Pour les communications libres, veuillez indiquer la classification de sujet AMS 2000 (veuillez consulter http://www.ams.org/msc/).

Important - Date limite de remise des résumés :
15 avril 2003.

Inscription

Un formulaire d'inscription est disponible auprès de la SMC:
Bureau administratif de la SMC,

577, av. King-Edward, bureau 109 C.P. 450, Succursale A
Ottawa (Ontario) CANADA K1N 6N5
Téléphone : 613-562-5702, Télécopieur : 613-565-1539
Courriel : reunions@smc.math.ca
Vous pouvez aussi vous inscrire sur le Web:

http://www.cms.math.ca/Events/été03

Les frais (en devises canadiennes) sont payables par chèque, VISA ou MasterCard. Les paiements en devises américaines seront acceptés, mais nous vous demandons de contacter votre institution financière pour prendre connaissance du taux de change en vigueur.

Le paiement doit nous PARVENIR À OTTAWA au plus tard le 1er mai pour que vous ayez droit aux tarifs réduits. Pour que votre inscription soit traitée avant la Réunion, votre paiement doit nous parvenir au plus tard le 31 mai.

	Avant le 1er mai	Après le 1er mai
Lunch des participants inclus		
Conférenciers principaux ou primés	0 $	0 $
Conférenciers	215	215
Organisateurs	145	145
Non-membres	430	560
Membres SMC/AMS/MAA avec subvention	290	375
Membres SMC/AMS/MAA sans subvention	145	190
Frais d'une journée	195	255
Postdocs, retraités	110	145
Enseignant(e)s (élém., second., CÉGEP), étudiant(e)s, sans-emploi	55	70
ATELIER NExTMAC SEULEMENT	55	55
Banquet (gratuits pour principaux/primés)	50	50

SMC = Société mathématique du Canada
AMS = American Mathematical Society
MAA = Mathematical Association of America

À quoi sert de s'inscrire à l'avance?

Vous vous demandez si vous devriez vous inscrire à l'avance ou le faire sur place? Voici quelques-uns des avantages de la préinscription :
– plusieurs personnes ont droit à une réduction en s'inscrivant avant la date limite pour tarifs réduits (voir section ci-dessus)
– votre nom figure dans la liste Web des participants sur le site Web
– votre trousse d'inscription sera déjà prête à votre arrivée le vendredi soir
– vous n'aurez pas besoin de faire la file pour vous inscrire à la première heure samedi matin
– les billets pour le banquet sont en vente maintenant, mais il pourrait ne plus en rester sur place
Pour ces raisons, nous vous encouragons à vous incrire à l'avance, soit avant ou après la date limite pour tarifs réduits. Pour vous inscrire à l'avance et profiter des avantages ci-dessus, remplissez les formulaires éléctroniques appropriés.

Politique de remboursement

Les participants qui désirent annuler leur inscription doivent en aviser le bureau administratif de la SMC par écrit avant le 31 mai pour se voir rembourser leurs frais d'inscription (moins 40 $). Les participants dont les communications libres n'auront pas été acceptées seront remboursés intégralement sur demande.

Êtes-vous admissible à une adhésion gratuite à la SMC?

Les membres de l'AMS et de la MAA qui s'inscrivent à une Réunion semestrielle de la SMC et qui ne sont pas membres de la SMC sont admissibles à une année d'adhésion gratuite à la SMC (offre unique).

Si vous êtes admissible, présentez-vous au kiosque de la SMC pour remplir une demande d'adhésion. Veuillez fournir une preuve d'adhésion à l'AMS ou à la MAA. Cette offre est destinée aux nouveaux membres seulement.

Hébergement

Il est fortement recommandé aux participants de réserver à l'avance. Des chambres ont été retenues aux endroits ci-dessous jusqu'aux dates précisées. Après ces dates, les hôtels ne prendront vos réservations que s'il reste des chambres. Les tarifs sont par nuit, par personne, et sont indiqués en devises canadiennes.

Crowne Plaza Chateau Lacombe 10111 Bellamy Hill, Edmonton (Alberta) Canada T5J 1N7
Emplacement : relié au campus par metro, 4 arrêts.
Arrivée : 13 h; départ : 13 h
Taxes applicables : TPS (7 %), taxe d'hôtel (5 %)
Réserver au plus tard le 11 mai 2003
Code de groupe : CMS 2003
Téléphone : 780-428-6611, sans frais : 1-800-661-8801
Télécopieur : 780-425-6564
Stationnement : 7,50 $ la nuit (service voiturier aussi disponible)

Tarifs : 85 $, 1 ou 2 personnes (1 lit)
85 $, 2 personnes (2 lits)
129 $, niveau Club Executive
149 $, suite Studio
199 $, suite Executif

Varscona Hotel
8206 - 106 Street, Edmonton (Alberta) Canada T6E 6R9
Emplacement : 20 minutes du campus à la marche
Arrivée : 15 h; départ : 12 h
Taxes applicables : TPS (7 %), taxe d'hôtel (5 %)
Réserver au plus tard le 11 mai 2003
Code de groupe : GMAT or 1008
Téléphone : 780-434-6111, sans-frais : 1-888-515-3355
Télécopieur : 780-439-1195
courriel: reservations@varscona.com
Stationnement : gratuit (service voiturier aussi disponible)

Tarifs : 110 $, 1 ou 2 personnes
20 $, par personne additionelle
(personnes de 12 ans et plus)
maximum de 4 personnes par chambre

Tower on the Park
9715 - 110 Street, Edmonton (Alberta) Canada T5K 2M1
Emplacement : relié au campus par metro,
1 arrêt, ou 20 minutes à la marche
Arrivée : 16 h; départ : 12 h
Taxes applicables : TPS (7 %), taxe d'hôtel (5 %)
Réserver au plus tard le 11 mai 2003
Code de groupe : 856
Téléphone : 780-488-1626
Télécopieur : 780-488-0659
Courriel : rgreen@toweronthepark.com
Stationnement : gratuit

Tarifs : 69 $, 1 ou 2 personnes (1 lit)
89 $, 1 ou 2 personnes (2 chambres)

Campus Tower Suite Hotel
11145 - 87 Avenue, Edmonton (Alberta) Canada T6G 0Y1
Emplacement : sur campus
Arrivée : 15 h; départ : 12 h
Taxes applicables : TPS (7 %), taxe d'hôtel (5 %)
Réserver au plus tard le 11 mai 2003
Code de groupe : CMS 2003 ou Leader Number 69940
Téléphone : 780-439-6060, sans frais : 1-800-661-6562
Télécopieur : 780-433-4410
Web : www.campustower.com
Stationnement : gratuit

Tarifs : 89 $, 1 ou 2 personnes
20 $ par personne additionelle
(personnes de 19 ans et plus)
maximum de 4 personnes par chambre

Résidences de l'Université de l'Alberta
44 Lister Hall, 87 Avenue at 116 Street, Edmonton (Alberta)
Arrivée : après 15 h; départ : 11 h
Taxes applicables : TPS (7 %), taxe d'hôtel (5 %) - inclus
Réserver au plus tard le 11 mai 2003
Code de groupe : CMS (ou Canadian Mathematical Society)
Téléphone : 780-492-4281, ¡¡service à la clientele¿¿
Sans frais : 1-800-615-4807 (au Canada)
Télécopieur : 780-492-7032
Web : http://www.hfs.ualberta.ca
Stationnement : 4 $ la nuit, permis disponibles

Tarifs : 33,60 $, 1 personne, 44,80 $, 2 personnes
petit-déjeuner et stationnement non compris

Vous êtes priés de faire vos propres réservations. Les tarifs préférentiels s'appliquent aussi aux deux jours qui précèdent et qui suivent la Réunion. VEUILLEZ DONNER LE CODE DE GROUPE S'IL Y A LIEU.

Réservations et annulations : Toute réservation doit être garantie par le paiement d'une nuit ou par une carte de crédit reconnue.

Au Crowne Plaza Chateau Lacombe, tout dépôt est remboursable sans pénalité si une personne annule sa réservation avant 18 h la date d'arrivée. Autrement, le dépôt

en entier ne sera pas remboursé. Si une personne ne se présente pas à l'hôtel, on lui facturera la première nuit de sa réservation. NOTE : À votre arrivée, on vous demandera de confirmer votre date de départ. Toute modification apportée à ce moment-là sera apportée sans frais. Si vous décidez de quitter avant la date confirmée, on portera des frais de 25 $ par jour sur votre carte de crédit. On tiendra évidemment compte des cas d'urgence.

Au Varscona, les réservations sont garanties jusqu'à 16 h le jour d'arrivée prévu. Tout dépôt est remboursable sans pénalité si une personne annule sa réservation avant 16 h la date d'arrivée. Autrement, le dépôt en entier ne sera pas remboursé. Si une personne ne se présente pas à l'hôtel, on lui facturera la première nuit de sa réservation.

Au Tower on the Park, les réservations sont garanties jusqu'à 16 h le jour d'arrivée prévu. Tout dépôt est remboursable sans pénalité si une personne annule sa réservation avant 16 h LE JOUR PRÉCÉDANT la date d'arrivée. Autrement, le dépôt en entier ne sera pas remboursé. Si une personne ne se présente pas à l'hôtel, on lui facturera la première nuit de sa réservation.

Au Campus Tower Suite Hotel, les réservations sont garanties jusqu'à 18 h le jour d'arrivée prévu. Tout dépôt est remboursable sans pénalité si une personne annule sa réservation avant 18 h LE JOUR PRÉCÉDANT la date d'arrivée. Autrement, le dépôt en entier ne sera pas remboursé. Si une personne ne se présente pas à l'hôtel, on lui facturera la première nuit de sa réservation.

Aux résidences de l'Université de l'Alberta, on demande un préavis de 48 pour annuler une réservation sans frais. Autrement, le dépôt en entier ne sera pas remboursé. Si une personne ne se présente pas à l'hôtel, on lui facturera la première nuit de sa réservation.

Services de garde

Des renseignements sur les services de garde seront fournis par les hôtels prévus pour la Réunion. On vous recommande de faire vos démarches et vos réservations à l'avance.

Prière de communiquer avec les hôtels directement pour faire une demande.

Nous publierons tout nouveau renseignement sur le site Web dès que nous le recevrons.

Déplacements

Ville d'Edmonton : Vous trouverez des renseignements détaillés sur l'Université de l'Alberta et la ville d'Edmonton (renseignements touristiques, température et climat locaux, cartes de la ville et des attractions touristiques, etc.) sur les sites Web suivants :

http://www.math.ualberta.ca/
http://www.edmonton.com/
http://weatheroffice.ec.gc.ca/canada_f.html

Stationnement : Le stationnement à l'Hôtel Crowne Plaza est disponible pour 7,50 $ la nuit (TPS inclus). Le service voiturier est aussi disponible.

Nous publierons tout nouveau renseignement au sujet des autres hôtels dès que possible.

Remerciements

Nous remercions les organismes suivants de leur soutien financier :
– le Département de mathématiques et des sciences statistiques de l'Université de l'Alberta
– Fond des conférences de l'Université de l'Alberta
– Faculté des sciences de l'Université de l'Alberta
– Institut de Physique Théorique de l'Université de l'Alberta
– Institut des mathématiques appliquées de l'Université de l'Alberta
– Faculté des sciences de l'Université de la Colombie-Britannique
– le Département de mathématiques de l'Université de la Colombie-Britannique
– Perimeter Institute for Theoretical Physics
– Canadian Institute for Theoretical Astrophysics
– Nelson, A Thomson Company
– le Comité du programme national (programme conjoint du Centre de recherches mathématique, de l'Institut Fields et de l'Institut Pacific)
– La Société mathématique du Canada tient à remercier les membres du Comité de coordination pour l'organisation de cette Réunion.

Comité de Coordination

Programme

Président et coordinateur : YanPing Lin (Alberta)
T. Choulli (Alberta) Terry Gannon (Alberta) Bin Han (Alberta) Thomas Hillen (Alberta) B. Huang (Alberta) RongQing Jia (Alberta) Y. Lin (Alberta) Vazz Linek (Winnipeg) S. Liu (Alberta) Ted Lewis (Alberta) Peter Minev (Alberta) Maung Min-Oo (McMaster) Michael A. Radin (Rochester Institute of Technology) Erik Talvila (Alberta) John van Rees (Manitoba) Tony Ware (Calgary) Eric Woolgar (Alberta) Mark Walton (Lethbridge) Graham Wright (SMC, d'office) XiaoQiang Zhao (Memorial).

Logistique

Président du comité local : Eric Woolgar (Alberta)
Monique Bouchard (SMC, d'office).

UPCOMING CONFERENCES

Fourth Annual Saskatoon Colloquiumfest

The Fourth Annual Colloquiumfest will take place on the U of S campus, Saskatoon, March 21st and 22nd, 2003. This year's emphasis in on *Model Theory and Ordered Structures*.

The preliminary list of speakers includes:
Lou van den Dries (Univ. of Illinois, Urbana, USA)
Philip Ehrlich (Ohio University, USA)
Tobias Kaiser (Univ. of Illinois, Urbana, USA)
Klaus Keimel (TU Darmstadt, Germany)
Margarita Otero (Univ. Autonoma Madrid, Spain)
Thomas Rohwer (Univ. of Illinois, Urbana, USA)
Thomas Scanlon (Berkeley, USA)
Patrick Simonetta (Paris 7, France)
Patrick Speissegger (Wisconcin, Madison USA)
Charles Steinhorn (Vassar College, USA)

This event is organized by the Research Unit Algebra and Logic: **http://math.usask.ca/fvk/algg.htm**.

Further information is available on the Valuation Theory home page: **http://math.usask.ca/fvk/Valth.html**

Those interested in attending should contact one of the organizers:

Franz-Viktor Kuhlmann (fvk@math.usask.ca)
Salma Kuhlmann (skuhlman@math.usask.ca)
Murray Marshall (marshall@math.usask.ca)

Fields Institute Program on Applied Homotopy Theory

During the month of September 2003, the Department of Mathematics at the University of Western Ontario will host a program on homotopy theory and its applications to other areas. Gunnar Carlsson, Paul Goerss, Ieke Moerdijk, Jack Morava and Fabien Morel will be in residence for some or all of the month. All of the events will take place in London, Ontario.

The focus of the month will be a special 5 day version of the Ontario Topology Seminar, beginning on Saturday, September 20 in the morning and ending on Wednesday, September 24 in the afternoon. The speakers who have agreed to come are listed below.

In addition, there will be several minicourses at other times during the month given by the five longer-term visitors. Each will consist of two to three lectures. The topics and dates will be announced later.

We have received funding from the Fields Institute and additional funding is being sought from other agencies. We expect to be able to provide some support to graduate students and recent Ph.D.'s (contact us if you are eligible).

We recommend you book a hotel room soon, as the conference overlaps with homecoming weekend at Western. (You can always cancel later.)

The organizers are Rick Jardine (jardine@uwo.ca) and Dan Christensen (jdc@uwo.ca). If you think you might attend, please let one of us know.

The web page for this event is at:
http://www.math.uwo.ca/homotopy/
and will be updated periodically.

Hotel and travel information is available at
http://jdc.math.uwo.ca/directions.html

Conference and mini-course speakers:

Alejandro Adem, Wisconsin
John Baez, Univ. of California
Riverside Paul Baum, Penn State
Gunnar Carlsson, Stanford
Wojciech Chacholski, Minnesota
Bill Dwyer, Notre Dame
Paul Goerss, Northwestern
Jesper Grodal, Chicago
Lars Hesselholt, MIT
Mikhail Kapranov, Toronto
Finnur Larusson, UWO
Ib Madsen, Aarhus
Peter May, Chicago
Haynes Miller, MIT
Ieke Moerdijk, Utrecht
Jack Morava, Johns Hopkins
Fabien Morel, Paris 7
Victor Snaith, Southampton
Neil Strickland, Sheffield
Bertrand Toen, Nice

From the President's Desk

We ended 2002 with a bang, thanks to the Winter Meeting held at the University of Ottawa. The support we received from the University of Ottawa for this event exemplifies the long and fruitful tradition of cooperation between our Society and the University.

The meeting included four plenary speeches, one public lecture and two prize lectures. These were supplemented by 13 symposia on a wide range of subjects, including four on applied mathematics, one on education, one on the history of mathematics, and one on communications.

We had the pleasure of honouring several of our members. The Coxeter-James Lecture was given by Lisa Jeffrey of the University of Toronto. The Doctoral Prize Lecture was delivered by David Kerr, a recent PhD from the University of Toronto. We had the opportunity to recognize Peter Lancaster of the University of Calgary for his important contributions to the advancement of mathematics in Canada by presenting him with this year's Distinguished Service Award. The G. de B. Robinson Award went to Ted Chinburg, Manfred Kolster and Victor Snaith for their article "Comparison of K-theory Galois module structure invariants," which appeared in the Canadian Journal of Mathematics in 2000.

The four plenary speakers were James Arthur (Toronto), Ren Carmona (Princeton), Victor Guillemin (MIT) and Maciej Zworski (Berkeley). The public lecture, delivered by Robert Zuccherato of Entrust, examined passwords and techniques to guard against unwanted attacks.

On behalf of all the participants, I would like to sincerely thank Daniel Daigle, Meeting Director, Walter D. Burgess and Andr Dabrowski, co-chairs of the local organizing committee, the members of the programming committee, and all the members of the University of Ottawa who have helped make this event a reality. I would also like to thank the CMS administrative staff, who work tirelessly and professionally to make these meetings possible.

The Board of Directors met in the afternoon of Saturday, December 7. At this meeting, members ratified the decision that the CMS will apply to become an associate member of ICIAM (International Council of Industrial and Applied Mathematics). The mandate of ICIAM is to promote applied and industrial mathematics at the international level, to facilitate interaction among member organizations, and to coordinate the planning of its International Congress, which, like the International Congress of Mathematicians, is held every four years. The next ICIAM congress will be held in Sydney on July 7-11, 2003. As a major society with the status of associate member, the CMS will enjoy voting rights at meetings of the ICIAM Board of Directors. ICIAM awards four different prizes every four years at its congresses: the ICIAM Lagrange Prize, presented to a mathematician who has made an exceptional contribution to applied and industrial mathematics; the ICIAM Collatz Prize, awarded to a young mathematician (under 42 years of age) for outstanding work on applied and industrial mathematics; the ICIAM Pioneer Prize; and the ICIAM Maxwell Prize, awarded to a mathematician who has demonstrated originality in applied mathematics. The Canadian Applied and Industrial Mathematics Society (CAIMS) is also a ICIAM member. For more information, visit ICIAM's web site at www.iciam.org.

The CMS is pleased to announce jointly with Nelson A. Thompson the creation of a new CMS Award of Excellence for Teaching, supported by Nelson A. Thompson. The purpose of this prize, which is distinct from the Adrien-Pouliot Prize for mathematics education, as is to meant to recognize excellence in mathematics teaching at the CEGEP or undergraduate level. The creation of this prize reflects our concern and involvement with all aspects of education through the development of course material, for example, and through interaction with students and other teachers. The prize will be awarded each year at the CMS Summer Meeting, the first such prize to be awarded at Dalhousie University in 2004. The call for nominations will open each year in September and close December 15, starting in 2003.

The Board of Directors spent some time reviewing the CMS's financial situation in detail. Our expenditures are well under control, but revenues are down, mainly because subscriptions to our publications have declined. In fact, if we do not find other sources of revenue, we may have to consider cutting back on our educational activities. The endowment fund has also declined in value in response to the bear market. When the endowment grants were established, the CMS agreed to contribute its operating surpluses to the fund until it reached $1.5 million in value. It then agreed to contribute 4% a year in order to maintain the fund. Grants are distributed through the Endowment Grants Competition. Last October, the stock market decline pushed the fund's value down to $1.4 million. Moreover, budget surpluses are now a thing of the past.

The Board of Directors heard the views of members of the Finance Committee and the Endowment Grants Committee on the future of the CMS's financial situation and on whether an Endowment Grants Competition should be held in 2004. The decision was made to hold a small competition in 2004, financed mainly out of monies that were not allocated in previous competitions. We will work hard in the coming years to improve CMS's financial situation. In particular, we hope to recruit a publications manager to promote our publications and to seek out new manuscripts.

Among the major events taking place in 2003, I would like to mention the Canadian School Mathematics Forum, which will be held at UQAM on May 16-18, 2003. The program is available on-line at http://www.smc.math.ca/Events/CSMF2003/.

NEWS FROM THE VICE PRESIDENTS

Edgar Goodaire
CMS Vice-President, Atlantic Region

Last year was a watershed for the mathematical sciences in Atlantic Canada. In June 2002, in a whirlwind tour, the Directors of the Canadian Mathematical Institutes, Ken Davidson (Fields), Nassif Ghoussoub (PIMS), and Jacques Hurtubise (CRM), visited Dalhousie and Memorial Universities and the University of New Brunswick, to explain to various officials the importance of a mathematical institute to a region and to lay out a plan for the establishment and advancement of such an institute in this part of the country. They came with an offer of substantial permanent funding for AARMS (the Atlantic Association for Research in the Mathematical Sciences) and an ambitious proposal from MITACS for a variety of seed projects contingent, of course, on an appropriate level of commitment and support from organizations in Atlantic Canada. After meetings with senior university administrators, government officials, and representatives from private industry in each jurisdiction, the three major Atlantic universities pledged to match the institutes' generous funding.

Stable long-term funding has been a goal of AARMS which, since its inception in 1995, has necessarily had to plan its activities on an ad hoc and tentative basis. AARMS is extremely grateful to the Directors of CRM, Fields and PIMS, and to Arvind Gupta (Scientific Director of MITACS, who also made a personal visit to our region, in October) for the confidence they have placed in us and for providing a concrete basis for progress in the next few years. Atlantic Canada owes Hermann Brunner, AARMS Director, profound thanks for his leadership, dedication and continual efforts on behalf of so many people.

One of the consequences and indications of the maturing of AARMS is a new management structure, similar to that of the Pacific Institute, which will facilitate fiscal accountability and scientific planning. A new Board of Directors will include Vice-Presidents from the three sponsoring universities, the directors of CRM, Fields and PIMS, and a Chair with a high profile in industry or business. A Scientific Review Panel will be responsible for reviewing and funding proposals (an Atlantic version of the National Program Committee) and for long-term scientific planning.

For the moment, the centrepiece of AARMS activities is an annual summer school which, by offering graduate courses for credit and at an introductory level, is probably the only activity of its kind in North America. Modelled after a similar venture in Perugia, Italy with a $30+$ year history, the AARMS Summer School offers four courses a year to about 30 students, each of whom is expected to register for two courses. While providing an opportunity for students in Atlantic Canada to take courses which might not be available at their institutions, the School is also anxious to attract students from just about anywhere. Bright undergraduates contemplating graduate studies are also encouraged to apply. Please visit *http://www.math.mun.ca/∼aarms* or write to *aarms@math.mun.ca* to signify your interest in the 2003 School, which will feature courses in Cryptography, Financial Mathematics, Mathematical Biology and Partial Differential Equations.

"They're doing math on their bedroom doors and the painters have no appreciation for their work. Please get your students to stop." So wrote the housing manager at Memorial University in one of the more amusing and telling commentaries on the first AARMS Summer School which was, in all aspects, a resounding success. Twenty-two students from China, Germany, Poland, Turkey, Alaska, Alberta, British Columbia, Newfoundland, Nova Scotia, Ontario and Quebec each registered for two of four courses in Algebra (Cesar Polcino Milies, São Paulo), Combinatorics (Jason Brown, Dalhousie), Differential Equations (Sue Ann Campbell, Waterloo and Penny Davies, Strathclyde), and Fractal Geometry (Kathryn Hare, Waterloo). Students were responsible for their transportation to St. John's, but upon arrival had all expenses covered, including textbooks or course notes. There are no registration fees.

AARMS continues to sponsor and encourage proposals for scientific workshops. With visitors from as far away as China, Finland and Portugal, Hermann Brunner and Xiaoqiang Zhao ran such a workshop last July (2002) in nonlinear differential equations and dynamical systems. In September, Yuri Bahturin (Memorial) and others ran an extraordinary workshop on polynomial identities which attracted to St. John's mathematicians from Brazil, Bulgaria, Hungary, Israel, Italy, Russia, as well as from many parts of North America. In October, in conjunction with the annual fall APICS[1] Mathematics and Statistics Conference, AARMS supported two workshops, one in Ring Theory (in memory of Patrick N. Stewart) organized by Margaret Beattie (Mount Allison)

[1] Atlantic Provinces Council on the Sciences

and Michael Parmenter (Memorial) and the other, in Numerical Analysis and Scientific Computation, organized by Paul Muir (St. Mary's) and Patrick Keast and Ray Spiteri (Dalhousie).

We urge all readers, when thinking about their next conference or workshop, to consider holding the activity in Atlantic Canada with the support of AARMS. And please, send your students to our 2003 Summer School!

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La dernière année a marqué un point tournant pour les mathématiques au Canada atlantique. En 2002, les directeurs des Instituts mathématiques du Canada, soit Ken Davidson (Fields), Nassif Ghoussoub (PIMS) et Jacques Hurtubise (CRM), ont fait une visite éclair aux universités Dalhousie et Memorial et à l'Université du Nouveau-Brunswick. Leur visite avait pour but d'expliquer à divers intervenants l'importance d'un institut mathématique pour une région et à planifier la création et le développement d'un tel établissement dans cette partie du pays. Ils avaient en mains une offre intéressante de financement permanent pour l'Association pour l'avancement de la recherche mathématique en Atlantique - AARMS (Atlantic Association for Research in the Mathematical Sciences) et une ambitieuse proposition de multiples projets de démarrage du réseau MITACS. Tous ces projets, bien entendus, étant conditionnels à l'appui et à un engagement financier approprié des organismes concernés du Canada atlantique. À la suite de ces rencontres avec des hauts dirigeants universitaires, des hauts fonctionnaires et des représentants du secteur privé dans chacune des provinces, les trois principales universités de l'Atlantique se sont engagées à égaler le généreux financement offert par les instituts.

L'obtention d'un financement stable à long terme était un objectif de l'AARMS qui, depuis sa création en 1995, était forcée de planifier ses activités au cas par cas et toujours sur une base conditionnelle. L'AARMS est extrêmement reconnaissante aux dirigeants du CRM, de l'Institut Fields et de l'Institut PIMS, et à Arvind Gupta (directeur scientifique du réseau MITACS, qui s'est rendu personnellement dans notre région en octobre) de la confiance qu'ils ont eue en elle et de lui avoir donné des outils qui lui permettront de croître au cours des prochaines années. Le Canada atlantique remercie sincèrement Hermann Brunner, directeur de l'AARMS, de son leadership, de son dévouement et de ses efforts continus au nom de nombreuses personnes.

L'une des conséquences et des signes de maturité de l'AARMS est une nouvelle structure de gestion, semblable à celle du PIMS, qui facilitera la question de la responsabilité financière et la planification scientifique. Un nouveau conseil d'administration se composera de vice-présidents provenant des trois universités subventionnaires, des directeurs du CRM, du Fields et du PIMS, et d'un président bien connu dans le secteur industriel ou le milieu des affaires. Un groupe d'examen scientifique se chargera de l'étude et du financement des projets proposés (version atlantique du Comité du programme national) et de la planification scientifique à long terme.

Pour l'instant, l'activité principale de l'AARMS est une session annuelle de cours d'été de mathématiques. L'association est probablement la seule entité nord-américaine à offrir une activité du genre, soit des cours d'introduction et des cours crédités de deuxième et de troisième cycles. Ayant pris exemple sur une initiative semblable qui fonctionne à Perugia (Italie) depuis plus de 30 ans, l'AARMS offre quatre cours d'été par année à une trentaine d'étudiants, à qui l'on demande de s'inscrire à deux cours chacun. En plus d'offrir à la population étudiante du Canada atlantique des cours que leurs établissements n'offrent pas toujours, l'AARMS espère aussi attirer des étudiants d'un peu partout. On encourage aussi les étudiants doués de premier cycle aspirant à des études supérieures à s'y inscrire. Pour de plus amples renseignements, passez au *http://www.math.mun.ca/∼aarms*, ou écrivez à *aarms@math.mun.ca* pour manifester votre intért envers la session 2003, qui mettra à l'horaire des cours de cryptographie, de mathématiques financières, de biologie mathématique et d'équations différentielles partielles.

"Ils s'amusent à résoudre des problèmes sur la porte de leur chambre, et nos peintres n'apprécient guère leur travail. Pourriez-vous leur demander d'arrêter?" écrivait le responsable du logement de l'Université Memorial. Voilà l'un des commentaires les plus amusants, mais éloquents que nous avons reus à propos de la première session de cours d'été de l'AARMS, qui a connu un succès retentissant sur toute la ligne. En tout, 22 étudiants de Chine, d'Allemagne, de Pologne, de Turquie, de l'Alaska, de l'Alberta, de Colombie-Britannique, de Terre-Neuve, de Nouvelle-Écosse, de l'Ontario et du Québec ont suivi deux des quatre cours offerts : algèbre (Cesar Polcino Milies, São Paulo), combinatoire (Jason Brown, Dalhousie), équations différentielles (Sue Ann Campbell, Waterloo et Penny Davies, Strathclyde) et géométrie des fractales (Kathryn Hare, Waterloo). Les étudiants devaient payer leurs frais de transport jusqu'à St. John's, mais toutes leurs dépenses étaient prises en charge à partir de leur arrivée, y compris les manuels ou les notes de cours. L'inscription aux cours d'été de l'AARMS est gratuite.

L'AARMS continue également à financer et à encourager les projets d'ateliers scientifiques. Les ateliers de juillet 2002, qui ont attiré des visiteurs d'aussi loin que la Chine, la Finlande et le Portugal, ont été donnés par Hermann Brunner et Xiaoqiang Zhao dans les domaines des équations différentielles non linéaires et des systèmes dynamiques. En septembre, Yuri Bahturin (Memorial) et d'autres per-

sonnes ont donné un atelier extraordinaire sur l'identité des polynômes qui a amené à St. John's des mathématiciens du Brésil, de Bulgarie, de Hongrie, d'Israël, d'Italie, de Russie et de tous les coins de l'Amérique du Nord. En octobre, en collaboration avec le congrès de mathématiques et de statistique annuel de l'APICS[2], l'AARMS a financé deux ateliers : l'un sur la théorie des anneaux (à la mémoire de Patrick N. Stewart), organisé par Margaret Beattie (Mount Allison) et Michael Parmenter (Memorial), l'autre sur l'analyse numérique et le calcul scientifique, organisé par Paul Muir (St. Mary's) ainsi que Patrick Keast et Ray Spiteri (Dalhousie).

Alors, avis à nos lecteurs qui préparent un congrès ou un atelier prochainement : songez à tenir votre activité au Canada atlantique avec le soutien de l'AARMS. Et n'oubliez pas d'envoyer vos étudiants nos cours d'été 2003!

Ninth Annual Canadian Undergraduate Conference

Report by Andy Culham, President

On July 2, 2002, sixty of this nation's brightest young mathematicians arrived at the University of Calgary eager to learn and meet other students studying mathematics. This day marked the beginning of the Ninth Annual Canadian Undergraduate Mathematics Conference (CUMC).

The first day featured an opening reception and an evening talk by Dr. Len Bos of the Department of Mathematics and Statistics at the University of Calgary. Dr. Bos entertained us with stories of 'hippies' and their hair and somehow used this to lead into a very intriguing lecture on Financial Mathematics and the use of Chaos and Fractals in this field.

The second day was the first of three consecutive days of student talks. This year an impressive 75% of the students in attendance presented a paper or problem of interest. All branches of mathematics were equally represented by the students. The topics ranged from the most theoretical aspects to the most applied. Also scheduled for each of these days was a plenary speaker to enlighten and inspire our young minds through their years of experience.

The various fields of mathematics were also very well represented by the plenary speakers over these three days. Dr. Robert Moody visited us from the University of Alberta to speak on the Mathematics of Tilings and Dr. Ian Frigaard from the University of British Columbia gave a well rounded talk in which he discussed the use of mathematics in industry followed by an actual industrial example. Finally, so as to not limit the use of mathematics to an academic setting, we were fortunate enough to have Mr. Richard Brisson from the Communications Security Establishment who traveled all the way from Ottawa to present his talk on the German Enigma and its historical and mathematical significance.

The final day of the conference is traditionally a mix of business and pleasure. After the final rounds of student talks, we concluded the mathematical portion of the conference with a talk on p-adic Numbers by our very own Dr. Clifton Cunningham. Dr. Cunningham's talk proved to be the favourite plenary talk of the week amongst the students.

Following the presentations we were off to Banff National Park for the remainder of the day. The beautiful city of Banff did not disappoint anyone. While some people went for a short hike or a dip in the hot springs, others were content to walk the streets and visit the numerous shops. The trip ended with a Stampede buffet at Wild Bill's Legendary Saloon in Banff. It was here that the venue for CUMC 2003 was chosen. After a very close race, the people had spoken and York University narrowly defeated McGill University for the right to host the event next year.

While the main focus of the week was to explore the wonderful world of mathematics, we did manage to fit in some social events as well. On Wednesday night, the Society for Calgary Undergraduate Mathematics (S.C.U.M.) sponsored a free pizza and beer night at the campus bar. This was a wonderful opportunity for the participants to meet one another and bond away from the classrooms. For the following two nights, many people stopped in at our hospitality suite in the residences and enjoyed some additional beverages, again compliments of S.C.U.M., as well as card games and dancing.

In order to facilitate an event such as this, a great deal of funding is required. This year we were overwhelmed with the generosity of our sponsors. Our major sponsors were the Department of Mathematics and Statistics, University of Calgary and the Pacific Institute for the Mathematical Sciences (PIMS). In addition we received significant contributions from the Faculty of Science, University of Calgary, the Canadian Mathematical Society (CMS), the Communications Security Establishment (CSE) and as previously mentioned, S.C.U.M.

The CUMC is a unique event in the Canadian mathematical community. It is the single opportunity each year for undergraduates to meet one another and possibly make lifelong friendships with their future colleagues, as well as the opportunity to present a paper in a non-threatening environment. The CUMC is continually growing and evolving. CUMC 2002 was a huge success, leaving most of us barely able to wait until next year when we can do it all again.

[2] Atlantic Provinces Council on the Sciences

Math in Moscow - Math à Moscou

The Canadian Mathematical Society and the Natural Sciences and Engineering Research Council are pleased to announce that the recipient of the first NSERC-CMS Math in Moscow Scholarship is Mr. Jonathan Kavanagh from Memorial University of Newfoundland. Mr. Kavanagh will be attending the 2003 Winter semester at the Moscow Independent University.

Two scholarships will be awarded in the Spring competition and the deadline is April 15, 2003. Further information on the NSERC-CMS Math in Moscow scholarships can be found at: www.cms.math.ca/bulletins/Moscow_web.html

La Société mathématique du Canada et le Conseil de recherches en sciences naturelles et en génie (CRSNG) ont le plaisir d'annoncer le premier lauréat de la bourse CRSNG-SMC Math à Moscou : M. Jonathan Kavanagh de l'Université Memorial de Terre-Neuve. M. Kavanagh ira étudier à l'Université indépendante de Moscou au semestre d'hiver 2003.

Deux autres bourses seront décernées au concours du printemps, dont la date limite est fixée au 15 avril 2003. Pour de plus amples renseignements sur la bourse CRSNG-SMC Math à Moscou, rendez-vous au : http://www.cms.math.ca/bulletins/Moscou_web.html

NEWS FROM THE INSTITUTES

New Deputy Director For The Fields Institute

Thomas S. Salisbury, Professor of mathematics, York University, has been appointed Deputy Director of The Fields Institute for Research in Mathematical Sciences, beginning August 1, 2003.

Thomas Salisbury received his B.Sc. from McGill University in 1979, and his Ph.D. in probability theory from the University of British Columbia in 1983. After spending two years at Purdue University, he moved to York University. He became a full professor in 1994 and chair of the department in 2000. He has held visiting positions at Stanford, Edinburgh, MSRI and the Fields Institute. His research includes probability theory and actuarial finance. He is the author of over two dozen papers, is on the editorial board of several journals in both probability and statistics, and is currently writing a book on "Parabolic Martin Boundaries". He has been very active in Fields Institute activities. In particular, he was one of the organizers of the Probability year in 1998–99, and was one of the organizers of the successful Quantitative Finance seminar. He has been involved with the Individual Finance and Insurance Decision Centre (IFID) of which he is currently secretary/treasurer. He has been very active in the Canadian Mathematical Society including a term as Vice President for Ontario, chair of the Publications committee, and Editor-in-Chief of the Canadian Mathematical Bulletin. He is also active in the Statistical Society of Canada.

More news from the Fields Institute

Activity this term at the Fields Institute centers around the thematic program on Automorphic Forms, focusing on the L-functions attached to automorphic representations. This subject is part of the "Langlands program", and the Fields program will concentrate on recent work of Kim and Shahidi on analytic continuation. Three graduate courses, given by Henry Kim, Jim Cogdell and Ram Murty, are currently in progress. There will be two workshops, the first March 4-8 on Shimura varieties and related topics, followed by the Coxeter lectures, delivered by Stephen Kudla on "Arithmetic Theta Series". The second workshop, May 5-9, will concentrate on Automorphic L-functions.

During the month of June, the Institute will host the Clay Mathematics Institute Summer School on Harmonic Analysis, Trace Formulas and Shimura Varieties. Many courses will be offered, ranging from those of a foundational nature to shorter advanced courses during the last week of June. The lecturers will be J.Arthur, J.Milne, R.Kottwitz, F.Murnaghan, S.DeBacker, M.Goresky, T.Haines, T.Hales and P.Sarnak.

For more information on the Automorphic Forms thematic program, see
www.fields.utoronto.ca/programs/scientific/02-03/automorphic_forms/index.html

The thematic program last fall was Set Theory and Analysis. It was an especially busy time at the Fields, with many visitors and graduate students. Two highlights of the program were lecture series by the distinguished mathematicians Saharon Shelah from the Hebrew University and Rutgers and Hugh Woodin from Berkeley. Shelah gave three lectures in early October on the application of "creature forcing" to the theory of measurable functions. A month later, Woodin delivered the Coxeter Lectures on the Continuum Hypothesis and the Ω Conjecture, and on Strong Axioms: Determinacy and Large Cardinals, which can be viewed as part of an ambitious project intended to resolve the Continuum Hypothesis. The audio of these lectures (and of most other events at the Institute) are available at *http://www.fields.utoronto.ca/audio/*.

On October 19 last fall, the Fields Institute hosted an "FRSC Day", at which new Fellows delivered a lecture on their work. The speakers and their titles were Peter Guthrie (UWO), Predicting how fast a chemical reaction will occur, Niky Kamran (McGill), Wave Equations in Kerr Geometry, Neal Madras (York), Self-Avoiding Walks and Related Models, and Vidyadhar Godambe (Waterloo), A Fundamental Paradox of Statistics.

The CRM-Fields Prize winner last year was John Friedlander of the University of Toronto. On October 22, he delivered the Prize lecture'Sieve Methods and the Distribution of Primes' at the Institute. The slides and audio of the lecture are available at www.fields.utoronto.ca/audio/02-03/CRM-Fields/friedlander/

Other Mathematics Service Providers / Autres groupes et services mathématiques

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IN MEMORIAM: Frederick Valentine Atkinson

by P.G. Rooney

Frederick Valentine Atkinson
University of Toronto

Professor Emeritus F.V.Atkinson, "Derick" to his friends and colleagues, of the University of Toronto, died November 13, 2002. He was born January 25, 1916 in Pinner, Middlesex, England. His father was a journalist and critic. He entered Queen's College of Oxford University in 1934 and received his B.A., with first class honours in mathematics and Russian in 1937; and in 1939 was awarded the degree of D.Phil. He was awarded the degree of M.A. in 1946. His doctoral thesis, in the area of analytic number theory, was under the direction of E.C.Titchmarsh. While at Oxford, Derick formed a close friendship with J.L.B.Cooper, which lasted till the latter's death.

When the war broke out, Derick entered the army, serving in intelligence, first at Bletchley Park and later in India. During the early part of his war service, Derick was attempting to learn Hungarian. Looking for Hungarian speakers, he met Dusja Haas who, with her parents, had left Czechoslovakia when Hitler took over that country, and who had lived in a Hungarian speaking part of Czechoslovakia. This led to the marriage of Dusja and Derick in 1943, a joyfully happy marriage which brought them three children. One of Dusja's favorite stories is that Derick proposed to her in Hungarian, their only common language, and her reaction was: "He doesn't know what he is saying!"

Derick served in the army throughout the war, attaining the rank of major. After his discharge from the army, Derick returned to Oxford and taught there from 1946 to 1948, then moving to University College, Ibadan, Nigeria, serving there for seven years. In 1956 he moved to Canberra College, now part of the National University of Australia. His final move was in 1960 to the University of Toronto where he remained until his retirement in 1981, and where he was chairman of the mathematics department from 1975 to 1981.

Derick's research initially was on the Riemann Zeta function. He obtained many deep results in this area, perhaps the most important of these being that of finding the second term in the asymptotic expansion of the mean square average of the Zeta function on the critical line, a result that has been improved on only in the last few years.This was published in Acta Mathematica in 1949. He then turned to eigenfunction expansions associated with difference and differential equations, obtaining very important results here too and publishing two books on the subject, one of which has been translated into Russian. He also published work in various other areas, including a basic paper on K-theory in Russian in a Russian journal -Mat. Sbornik. In all Derick published more than seventy research papers, the two books mentioned, and supervised the doctoral theses of six students.

In personality, Derick seemed a very quiet man but a little probing revealed immense depth, perspicacity and ability. Derick's personality served him well during his time as chairman of the mathematics department in Toronto, for he became chairman at a time of some turmoil in the department, but Derick's quiet and dignified temperament and hard work soon cooled things down and when his initial appointment of three years was up he was prevailed upon to stay another three years.

In all things social he was complemented by his wife Dusja, his exact opposite in personality so that they made a very balanced couple.

Derick's achievements have been recognized by a large number of honours, the most notable being election to fellowship in the Royal Society of Canada and to honourary fellowship in the Royal Society of Edinburgh, the McDougall-Brisbane prize of the Royal Society of Edinburgh and the Humboldt prize by the government of Germany.

From the time of his coming to Canada, Derick was a member of the Canadian Mathematical Society and served on its board of directors and on many of its committees. In 1989 Derick was elected to the presidency of the Society, and served a two year term with his usual great diligence and quiet dignity.

In 1992 Derick suffered a massive stroke while in his office, being discovered there by Dusja and his daughter Vivienne. In consequence he was permanently impaired, being partly paralyzed and unable to speak For the next ten years he was tenderly cared for by Dusja. He clearly could recognize people, for his face would brighten up immediately when friends visited; indeed one time within the last year he was watching television and started banging on something to attract Dusja's attention. When she came in, he pointed to the screen, and there was one of his colleagues from the mathematics department. Finally, he slipped away on November 13. Derick is survived by his wife, Dusja, three children Stephen Atkinson, Dr. Leslie Atkinson and Dr. Vivienne Chisolm, four grandchildren and a sister, Mrs. Ann Harland.

AARMS SUMMER SCHOOL 2003

The second annual Summer School of the Atlantic Association for Research in the Mathematical Sciences (AARMS) will take place at Memorial University, St. John's, Newfoundland, from July 21 through August 15, 2003. The School, which will again offer four courses,is intended for graduate students 0and undergraduate students contemplating graduate school from all parts of the world. Each participant will be expected to register for two courses, each consisting of four 50-minute lectures and two ninety-minute problem sessions per week. As these are Memorial University graduate courses, grades will be given and transfer credits facilitated wherever possible. The following courses will be offered this year:

- Cryptography, by Professor Hugh Williams, University of Calgary
- Financial Mathematics, by Professor John van der Hoek, University of Adelaide, Australia
- Mathematical Biology, by Professor Jianhong Wu, York University
- Partial Differential Equations (Professor to be confirmed)

In addition, AARMS is sponsoring a public lecture by Professor Robert Elliott, RBC Financial Group Professor of Financial Mathematics at the University of Calgary who, with John van der Hoek, is also coordinating a research level workshop in Financial Mathematics to take place immediately after the School concludes on August 17. AARMS expects to cover the travel expenses of participants from Atlantic Canada while most other students should be prepared to fund their own travel to and from St. John's. The local expenses of ALL students (accommodation, meals, text books) will be met in full by the School. There are no registration fees. For more information and to express interest in attending, visit the School's web site—http://www.math.mun.ca/ aarms/summerschools/SS2003—or email Edgar Goodaire (edgar@math.mun.ca) directly.

CONCORDIA UNIVERSITY
DEPARTMENT OF MATHEMATICS AND STATISTICS

Four limited term appointments

The Department of Mathematics and Statistics at Concordia University in Montreal, Canada invites applications for up to four limited-term appointments to teach courses in areas that include: Analysis, Numerical Analysis, Dynamical Systems, Optimization, Probability and Statistics.

Applicants must have a PhD and excellent teaching abilities. These positions are full-time, limited-term appointments, beginning August 15, 2003 and ending May 31, 2004. Hiring is subject to budgetary approval. These positions are normally at the rank of Lecturer or Assistant Professor. Candidates will be expected to teach three courses per semester. Applications should consist of a letter of intent, a curriculum vitae, a list of publications, a statement of teaching and research interests and three letters of reference. Please forward all applications to:

Dr. Hershy Kisilevsky, Chair
Department of Mathematics and Statistics
Concordia University
7141 Sherbrooke St. West, Suite HB- 200
Montreal, Québec H4B 1R6

Review of applications will begin on **March 1, 2003** and continue until the positions are filled. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. Concordia University is committed to employment equity and encourages applications from women, aboriginal peoples, visible minorities and disabled persons.

MEMORIAL UNIVERSITY
DEPARTMENT OF MATHEMATICS AND STATISTICS

Head - Department of Mathematics and Statistics

Memorial University is seeking an exceptional individual with vision, dedication and energy to develop and lead the Department of Mathematics and Statistics. Applicants should have demonstrated excellence in research and teaching in an area of mathematics or statistics, possess excellent communication and interpersonal skills and be able to show leadership and administrative ability appropriate to the post. The appointment, effective August 1, 2003 or as soon thereafter as is mutually agreeable, is for a 3-year renewable term and includes an appointment at the rank of Associate or Full Professor.

The department includes over 35 full-time faculty and offers undergraduate and graduate programs at the Masters and Ph.D. levels. For an overview of Memorial or the department visit www.mun.ca or www.math.mun.ca respectively.

Memorial University is the largest university in Atlantic Canada. As the province's only university, Memorial plays an integral role in the educational and cultural life of Newfoundland and Labrador. Offering diverse undergraduate and graduate programs to almost 16,000 students, Memorial provides a distinctive and stimulating environment for learning in St. John's, a very safe, friendly city with great historic charm, a vibrant cultural life, and easy access to a wide range of outdoor activities.

A curriculum vitae and the names of four referees, at least one of whom can comment on leadership ability, should be sent to the address below. **The Committee will begin active consideration of applications on February 14, 2003**.

Search Committee
Math/Stats Headship
c/o Dean of Science
Memorial University
St. John's, NL A1B 3X7

Memorial University is committed to employment equity and encourages applications from qualified men and women, visible minorities, aboriginal people and persons with disabilities. In accordance with Canadian Immigration requirements, priority will be given to Canadian citizens and permanent residents of Canada.

THE UNIVERSITY OF WESTERN ONTARIO
DEPARTMENT OF MATHEMATICS

Assistant Professor

Applications are invited for a probationary (tenure track) position at the Assistant Professor level to commence July 1, 2003.

The successful candidate will have an outstanding record of research and publication in geometric analysis, and will be expected to maintain an ongoing vigorous research program. The candidate will also have a commitment to and demonstrated aptitude for teaching, and will be expected to teach at the undergraduate and graduate levels and to supervise graduate theses.

Those interested in applying for this position should forward a curriculum vitae and have at least three letters of reference sent to:

Professor J. F. Jardine, Chair
Department of Mathematics
The University of Western Ontario
London, Ontario N6A 5B7 Canada

At least one letter of reference should include a detailed comment on the teaching abilities of the applicant.

We also welcome e-mail inquiries and submissions, to be sent to the address: math-pos@uwo.ca.
Deadline for applications is **February 28, 2003**.

Position is subject to budgetary approval. All qualified candidates are encouraged to apply; however Canadians and permanent residents will be given priority. The University of Western Ontario is committed to employment equity and welcomes applications from all qualified women and men including visible minorities, aboriginal people and persons with disabilities.

UNIVERSITY OF WINNIPEG
DEPARTMENT OF MATHEMATICS AND STATISTICS

Assistant Professor

The Department of Mathematics & Statistics at the University of Winnipeg invites applications for a tenure-track faculty position in Mathematics at the Assistant Professor level. Candidates should have a demonstrated commitment to undergraduate teaching and research. Subject to budgetary approval, the effective date of appointment will be July 1, 2003, or as soon afterward as possible.

The focus of our department's research efforts have been in Graph Theory and Combinatorics; however, strong candidates in all areas of Mathematics are encouraged to apply. Candidates should have a Ph.D. or be near completion.

The University of Winnipeg is committed to employment equity, welcomes diversity in the workplace, and encourages applications from all qualified individuals including women, members of visible minorities, aboriginal persons, and persons with disabilities. In accordance with Canadian Immigration requirements, this advertisement is initially directed to Canadian citizens and permanent residents.

Deadline for the submission of applications is **March 1, 2003**. Interested applicants should send a curriculum vitae, including the names of three referees to:

Dr. James Currie, Chair
Department of Mathematics and Statistics
University of Winnipeg
515 Portage Avenue
Winnipeg, Manitoba, R3B 2E9, Canada
Fax: 204-783-7981
email: j.currie@uwinnipeg.ca

YORK UNIVERSITY
DEPARTMENT OF MATHEMATICS AND STATISTICS

Tenure-track – Assistant Professor

Applications are invited for a tenure-track appointment at the Assistant Professor level in the Department of Mathematics and Statistics to commence July 1, 2003. Applications in Financial or Actuarial Mathematics will be considered. The successful candidate must have a PhD and is expected to have a proven record of research excellence and superior teaching ability. Preference will be given to candidates who can strengthen existing areas of present and ongoing research activity.

The selection process will begin on April 15, 2003. All positions at York are subject to budgetary approval. Applicants should send resumes and arrange for three letters of recommendation (one of which should address teaching) to be sent directly to:

Mathematics Search Committee
Department of Mathematics and Statistics
York University, 4700 Keele Street
Toronto, Ontario, Canada, M3J 1P3
Fax: (416) 736-5757
E-mail: math.recruit@mathstat.yorku.ca
www.math.yorku.ca/Hiring/

York University has an Affirmative Action Program with respect to its faculty and librarian appointments. The designated groups are: women, racial/visible minorities, persons with disabilities and aboriginal peoples. Persons in these groups must self-identify in order to participate in the Affirmative Action Program. The Department of Mathematics and Statistics welcomes applications from persons in these groups.

The Affirmative Action Program can be found on York's website at www.yorku.ca/acadjobs or a copy can be obtained by calling the affirmative action office at 416-736-5713. All qualified candidates are encouraged to apply; however, Canadian citizens and Permanent Residents will be given priority.

Université du Québec à Montréal
Case postale 8888, succursale Centre-Ville
Montréal (Québec) Canada H3C 3P8

Tenure Track Position in Mathematics (Geometry –Topology) at UQAM

The Université du Québec à Montréal invites applications for a tenure-track position in the département de mathématiques starting Janury 1, 2004. Applicants must have

- a doctorat in mathematics.
- an excellent research record in the area of geometry-topology as well as a dynamic research programme in this area.
- the background to add a new dimension to the research profile of the department's geometry-topology group.

Current interests of the members of the department include differential geometry, global analysis, low-dimensional topology, and algebraic topology. Applicants are also expected to be dedicated to excellence in teaching at the undergraduate and graduate level. Teaching is done in French at UQAM.

The département de mathématiques has two research groups: one in geometry and topology (CIRGET) and one in combinatorics and theoretical computer science (LACIM). These groups are major components of the mathematics network formed by the four Montreal universities. For further information please visit the web sites http://www.math.uqam.ca and http://www.math.uqam.ca/cirget/jobinfo.html

Applicants should submit a dossier by January 15, 2003, containing a detailed curriculum vitae, a statement of research interests, copies of a maximum of five articles, and at least three letters of reference sent directly to:

Robert V. Anderson, directeur
Département de mathématiques
Université du Québec à Montréal
PO Box 8888, Postal Station Centre-Ville
Montreal (Quebec) Canada H3C 3P8

Dossiers received after January 15 will be taken into consideration in the case that the position is not filled.

UQÀM

Université du Québec à Montréal
Case postale 8888, succursale Centre-Ville
Montréal (Québec) Canada H3C 3P8

Poste de Professeur de Mathématiques (Géométrie – Topologie) à l'UQAM

Le département de mathématiques de l'Université du Québec à Montréal est à la recherche d'un mathématicien pour combler un poste de professeur régulier. La date d'embauche est prévue au 1er Janvier 2004. On recherche des candidats possédant

- un doctorat en mathématiques;
- un excellent dossier de recherche en géométrie et topologie ainsi qu'un programme de recherche très dynamique;
- une expertise complémentaire à celles des chercheurs actuellement dans l'équipe de géométrie et topologie;

Parmi les intérêts de recherche de ceux-ci se trouvent la géométrie différentielle au sens large, incluant l'analyse sur les variétés, la topologie de basse dimension et la topologie algébrique. Les candidats devront démontrer d'excellentes aptitudes en enseignement du 1er au 3e cycle universitaire. L'enseignement se fait en français à l'UQAM.

Le département de mathématiques de l'UQAM possède deux groupes de recherche : un en géométrie et topologie (CIRGET) et un en combinatoire et informatique-mathématique (LACIM). Ces groupes sont des éléments importants du réseau de recherche en mathématiques regroupant les quatre universités de Montréal. Pour de plus amples informations, veuillez consulter les sites web http://www.math.uqam.ca et http://www.math.uqam.ca/cirget/jobinfo.html

Les personnes intéressées sont priées de faire parvenir, avant le 15 Janvier 2003, un curriculum vitae détaillé incluant une description des intérêts de recherche, un maximum de cinq copies d'articles de recherche, ainsi qu'un minimum de trois lettres de référence envoyées directement à l'adresse suivante :

Robert V. Anderson, directeur
Département de mathématiques
Université du Québec à Montréal
C.P. 8888, Succursale Centre-Ville
Montréal (Québec) Canada H3C 3P8

Toutefois, les candidatures reçues après le 15 janvier seront prises en considération advenant le cas où le poste n'aurait pas été comblé.

UQÀM

CALENDAR OF EVENTS / CALENDRIER DES ÉVÉNEMENTS

FEBRUARY 2003 **FÉVRIER 2003**

10–15 Mathématiques Appliquées et Applications des Mathématiques (Nice, France) *www.acm.emath.fr/amam/*

APRIL 2003 **AVRIL 2003**

31 – March 4 ICMS Workshop: SDEs and SPDEs, Numerical Methods and Applications (International Centre for Mathematical Sciences, Edinburgh) *www.ma.hw.ac.uk/icms/meetings/2003/sde/index.html*

MAY 2003 **MAI 2003**

11–16 International Conference on General Control Problems and Applications (GCP2003) : Dedicated to the 100th anniversary of A. N. Kolmogorov (Tambov Sate University, Tambov, Russia)
www.opu2003.narod.ru/

14-18 Complex Systems and Computer Science in Sport (Barcelona) *Natàlia Balagué: www-ma1.upc.es/comcom/*

16-18 Canadian School Mathematics Forum 2003 / Forum canadien sur l'enseignement des mathématiques 2003 (Montréal, Québec)
www.cms.math.ca/Events/CSMF2003/
www.smc.math.ca/Reunions/FCEM2003/

24–30 Conference in Number Theory in Honour of Professor H.C. Williams. (Banff, Alberta)
www.fields.utoronto.ca/programs/scientific/02-03/numtheory/

30–June 1 Annual Meeting of the Canadian Society for History and Philosophy of Mathematics; Special Session: Maritime Mathematics (Dalhousie University, Halifax)
www.cshpm.org ; baltus@oswego.edu

JUNE 2003 **JUIN 2003**

8–15 41st International Symposium on Functional Equations (Noszvaj, Hungary)
pales@math.klte.hu ; http://riesz.math.klte.hu/˜isfe

14–16 CMS Summer Meeting / Réunion d'été de la SMC (University of Alberta, Edmonton, Alberta)
www.cms.math.ca/Events/ ; www.smc.math.ca/Reunions/

17–21 Fourth Butler Memorial Conference (University of Alberta, Edmonton, Alberta, Canada)
http://conley.math.ualberta.ca/butler.html

18–21 First Joint Meeting between AMS and Real Sociedad Matematica Espanola (Seville, Spain) *www.us.es/rsme/-ams/*

23-25 SIAM Conference on Mathematics for Industry: Challenges and Frontiers (The Metropolitan Hotel, Toronto, ON) *meetings@siam.org*

JULY 2003 **JUILLET 2003**

1–10 Advanced Course on Polynomial Identity Rings (Bellaterra, Barcelona, Spain) *Ferran Cedó: www.crm.es/Pl-rings*

7–11 Fifth International Congress in Industrial and Applied Mathematics (Sydney, Australia) *www.iciam.org*

17–19 44th International Mathematical Olympiad / 44e Olympiade internationale mathématique (Tokyo, Japan)
http://olympiads.win.tue.nl/imo/

21–Aug. 15 Second Annual AARMS Summer School for Graduate Students (St. John's, Newfoundland)
www.math.mun.ca/ aarms/summerschools

27–Aug. 9 Banach algebras and their applications (University of Alberta, Edmonton, AB)
www.math.ualberta.ca/ ba03/

AUGUST 2003 **AOÛT 2003**

4–9 International Algebraic Conference (Lviv, Ukraine) *topos@franko.lviv.ua*

5–8 12th International Workshop on Matrices and Statistics (IWMS 2003), (Dortmund, Germany)
www.statistik.uni-dortmund.de/IWMS/main.html

SEPTEMBER 2003 **SEPTEMBRE 2003**

2 – 6 Barcelona Conference on Asymptotic Statistics, Bellaterra (Barcelona, Spain) *Vladimir Zaiats: www.crm.es/bas2003*

16 – 20 Barcelona Conference on Set Theory, Bellaterra (Barcelona, Spain) *Joan Bagaria: www.crm.es/set-theory*

DECEMBER 2003 **DÉCEMBRE 2003**

6–8 CMS Winter Meeting / Réunion d'hiver de la SMC (Simon Fraser University, Harbour Centre, Vancouver, British Columbia) *Monique Bouchard: meetings@cms.math.ca*

SUMMER 2004 **ÉTÉ 2004**

CMS Summer Meeting / Réunion d'été de la SMC (Dalhousie University, Halifax, Nova Scotia)
Monique Bouchard: meetings@cms.math.ca

JANUARY 2004 **JANVIER 2004**

21 – 30 Advanced Course on Ramsey Methods in Analysis, (Bellaterra, Barcelona, Spain)
Joan Bagaria: www.crm.es/RamseyMethods

FEBRUARY 2004 **FÉVRIER 2004**

2 – 13 Advanced Course on Contemporary Cryptology, (Bellaterra, Barcelona, Spain)
Paz Morillo: www.crm.es/ContemporaryCryptology

JUNE 2004 **JUIN 2004**

Mathematical Foundations of Learning Theory (Barcelona, Spain)
Gábor Lugosi: www.crm.es/MathematicalFoundations

4–11 The 10th International Congress on Mathematical Education (Copenhagen, Denmark) *www.ICME-10.dk*

27 – July 2 European Congress of Mathematics, (Stockholm, Sweden)
Ari Laptev: laptev@math.kth.se

JULY 2004 **JUILLET 2004**

5 – 16 Advanced Course on Automata Groups, (Bellaterra, Barcelona, Spain)
Warren Dicks: www.crm.es/AutomataGroups

12–15 First Joint Canada-France meeting of the mathematical sciences / Premier congrès Canada-France des sciences mathématiques, (Toulouse, France)
www.cms.math.ca/Events/Toulouse2004/
www.smc.math.ca/Reunions/Toulouse2004/

DECEMBER 2004 **DÉCEMBRE 2004**

CMS Winter Meeting / Réunion d'hiver de la SMC, (McGill University, Montréal, Québec)
Monique Bouchard: meetings@cms.math.ca

RATES AND DEADLINES 2003
2003 TARIFS ET ÉCHÉANCES

Net rates/Tarifs nets	Institutional Members Membres institutionels	Corporate Members Membres organisationnels	Others Autres
Full Page	$ 235	$ 440	$ 585
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February/février	December 1 décembre
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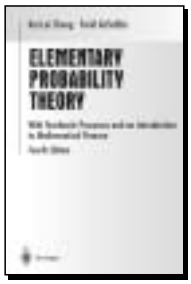
The CMS Notes is mailed in the first week of the issue month. Subscription to the Notes is included with the CMS membership. For non-CMS members, the subscription rate is $50 (CDN) for subscribers with Canadian addresses and $50 (US) for subscribers with non-Canadian addresses.

Les Notes de la SMC sont postées la première semaine du mois de parution. L'adhésion à la SMC comprend l'abonnement aux Notes de la SMC. Le tarif d'abonnement pour les non-membres est de 50 $ CAN si l'adresse de l'abonné est au Canada et de 50 $ US autrement.

SPRINGER FOR MATHEMATICS



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E.J. BARBEAU, University of Toronto, Canada

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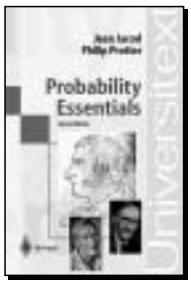

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