



CMS NOTES de la SMC

FROM THE PRESIDENT'S DESK

Tom Salisbury
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of the Borwein family in establishing the *David Borwein Distinguished Career Award*, the inaugural version of which was won by Richard Kane last year. The winner of the second iteration will be announced shortly. The physical prize which accompanies the award is a polished bronze sculpture by the mathematical artist Helaman Ferguson, based on a surface related mathematically to both the NaCl crystal, and to summability theory. At the Banquet, Ontario Attorney General Chris Bentley presented a copy of Ferguson's sculpture to David and Bessie.

At the London Board meeting, it was announced that the CMS intends to appoint **Joseph Khoury** (Ottawa) as the next Executive Director of the Society. Joseph, who currently chairs our Education committee, will be replacing his colleague Graham Wright at the end of 2008. That date marks Graham's retirement from this position, after three decades of outstanding service. I look forward to working with both Graham and Joseph to ensure a smooth transition, and a continuation of the dedicated and professional standards Graham has set for this leadership position.

The Society's **finances** were a topic of much discussion in London. There is a significant

deficit for 2007, largely as a result of the value of the Canadian dollar relative to its American counterpart. Our journals, which are priced outside Canada in US currency, are a major source of revenue for the Society, and foreign exchange has naturally cut into that revenue recently. The Society has taken steps to stabilize journal revenue, but is also looking seriously at the expenses we incur in our research and education divisions. As readers of this newsletter will be aware, our research meetings require a significant subsidy from the society, in large part due to the professional staff now required to run our large and complex meetings. The **structure of our meetings** was discussed, both at the Board, and in a number of other venues. There was strong support voiced for the value of our meetings, and the need to bring the community together twice a year as we have consistently been doing. But there was also a clear willingness to examine the organization of those meetings, particularly support for sessions (where what the CMS offers goes beyond what other societies provide) and registration fees (where the CMS's fees are low, compared to fees charged by other organizations of similar size). Members can expect proposals to emerge from



Do you want fries with that?

Il est encore plus facile de juger de l'esprit d'un homme par ses questions que par ses réponses.

Duc de Lévis, *Maximes, préceptes et reflexions*.

Professor X spends her time in her Calculus class explaining the Mean Value Theorem, pointing out how it enables us to obtain information about a function from the behavior of its derivative. She then asks, "Any questions?" A student puts up his hand and asks, "Will this be on the test?" We all know very well how a professor gets disconcerted and disheartened by such a question. It reveals clearly how much attention has been paid to the professor's explanation. Most students are inattentive; I have found them busy in the class with some unrelated assignment.

There are other instances of such type of questions, such as the following:

"Are we responsible for the proof?" This is very common. The very word 'proof' evokes an allergic reaction in students. The students might even have been told earlier about what is expected of them concerning proofs. Such a question is asked not only in Mathematics courses. My colleague Robert Dawson tells me that this question reminds him of the story of an English professor who had been teaching some classic poem. A student asks "Are we responsible for this?" Answer: "Young lady, if you were responsible for this poem I would kneel at your feet. You are not, but it will be on the exam."

"I have a Biology test on Monday and a Chemistry test on Tuesday. Can I write your test on Wednesday or Thursday?" It could be that some other students also have the same problem. Then the professor could accommodate and reschedule accordingly. Handling such requests judiciously would be helpful to professors in maintaining cordial rapport with the class. Quite often there are cases where students have to miss a test due to health or other valid reasons; a make-up test has to be given. Should it be the same test or a different one? If different, some students might argue about level of difficulty.

"Doesn't this answer deserve some part credit?" Students always argue for more marks. Sometimes they think that, for an answer which they feel is almost similar to their friend's, they deserve the same mark given to the friend's answer. Settling these arguments is not easy; much depends on the individual cases. As an early 19th century proverb says, 'there are two sides to every question.'

"I must have a B grade to maintain my scholarship. Can you please oblige?" Such a request is usually made by a student whose marks are near the borderline between two grades. He might further say that his grade is B in all of his other subjects. Upon verification it may turn out that he is playing the same game with other professors too!

It is not always the case that questions from students are as frivolous as the title of this editorial. Students do ask appropriate and intelligent questions in many cases. Answering such questions might benefit the whole class as well. The professor may also take the opportunity to explain further.

Steven Krantz [2] relates an interesting anecdote: "A student

asked, "What is 'infinity'?" The professor nodded seriously and said, "It is like a long line that never stops," and he proceeded to apply the chalk to the blackboard, walking in a determined manner toward the side of the room. When he reached the window he kept going, through and out of it. Suddenly there was no teacher in the classroom. The students sat several moments in bewildered silence until finally one of them looked out the window and found the professor two floors below, spread-eagled in the bushes (and unharmed)."

A humorous answer to a question would certainly enliven the class. Howard Eves [1] gives an example: "A mathematics student asked a particularly stupid question in class. Not wishing to discourage the student and yet desiring to be honest, the teacher looked directly at the top of the student's head and said, "You know, you have a point there."

References:

1. Howard Eves, *Mathematical Circles Revisited*, No. 189. MAA 2003.
2. Steven G. Krantz: *Mathematical Apocrypha*, page 6, MAA 2002.

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Salade ou frites avec ça?

Les questions des étudiants : tantôt indigestes, tantôt savoureuses

Il est encore plus facile de juger de l'esprit d'un homme par ses questions que par ses réponses.

Duc de Lévis, *Maximes, préceptes et réflexions.*

Nous y avons tous passé, comme cette professeure qui, dans son cours de calcul, fait des pieds et des mains pour démystifier le théorème de la valeur moyenne et expliquer comment celle-ci nous permet de mieux comprendre une fonction d'après le « comportement » de son dérivé... Soucieuse, elle sonde ensuite la compréhension de la classe : « Avez-vous des questions? » Aussitôt, un étudiant l'interpelle : « Ce que vous venez d'expliquer, ça fait partie de l'examen?? »

Impossible de nier à quel point ce genre de question peut nous dégonfler, nous démoraliser. Au diable la belle explication, les exemples, le souci de simplification : la plupart des étudiants ont l'esprit ailleurs à ces moments—souvent absorbés par un travail qui n'a rien à voir avec le sujet.

D'autres questions du genre font tout autant de ravages au cœur pédagogique ou lui demandent une sage indulgence, par exemple :

« Est-ce que nous sommes «responsables» de la preuve? » Question presque incontournable. À lui seul, le mot *preuve* constipe les méninges de la masse étudiante, même si le professeur se fait un devoir d'énoncer à l'avance ce à quoi on s'attend en matière de preuve. La « *preuvophobia* » ne se limite pas aux cours de mathématique, en fait. Mon collègue Robert Dawson me dit que la question lui fait penser au professeur de lettres qui venait de présenter une œuvre de poésie magistrale. La première question de son auditoire étudiant : « Est-ce que nous en sommes «responsables»? » La réponse : « Mademoiselle, si vous en étiez les responsables, je me prosternerais devant vous. Ce n'est pas le cas, mais je vous assure que le texte est à l'examen... »

« J'ai un test de bio lundi et un test de chimie mardi; est-ce que je peux faire le vôtre mercredi ou jeudi au lieu? » Il faut l'admettre : d'autres élèves ont peut-être le même problème, et une approche conciliante de notre part nous permet de conserver de bons rapports avec la classe. Et quoi faire lorsque certains étudiants doivent rater un test en raison de maladie ou d'autres circonstances exténuantes? Une reprise se justifie, certes, mais doit-on donner exactement le même test ou en élaborer un nouveau? C'est un « *pensez-y bien* », surtout qu'on peut contester la difficulté d'une nouvelle version.

« Ma réponse mérite au moins quelques points, n'est-ce pas? » Autre cas incontournable. Le plus grand plaidoyer des étudiants, c'est pour une meilleure note. Les jeunes comparant leurs copies, leurs réponses, et s'ils y voient une ressemblance quelconque, ils voudront la même note que leurs camarades. Ici, les solutions passe-partout n'existent pas, et notre instinct pédagogique doit y aller cas par cas en se rappelant le bon vieux dicton « dans toute querelle, il y a deux points de vue ».

« Pour conserver ma bourse, il me faut au moins un B. On peut s'entendre là-dessus? » Ce genre de demande vient le plus

souvent d'étudiants dont les notes frôlent le minimum permis; ils vous diront peut-être du même coup qu'ils ont un B dans tous leurs autres cours. Voilà qu'il faut faire appel à notre, comment dire, « curiosité pédagogique » pour voir si d'autres professeurs se font chanter la même rengaine!

Bien sûr, les questions d'étudiants ne sont pas toutes aussi frivoles que le laisse entendre le titre de ce modeste éditorial. De fait, les bonnes questions probantes, intelligentes, percutantes résonnent souvent en salle de classe, et y répondre clairement profite au groupe entier—d'ailleurs, c'est parfois l'occasion d'approfondir une notion ou de l'illustrer davantage.

Steven Krantz [2] raconte un cas intéressant dans cette veine : « Un étudiant demande "C'est quoi l'infini?" Le professeur le salue sobrement de la tête, craie en main, et lui dit "C'est comme une ligne qui continue et continue et continue..." Du même coup, le professeur part d'un bon pas et trace une ligne non seulement au tableau, mais tout au long du mur jusqu'à la fenêtre grand ouverte, qu'il emboîte et franchit sans hésiter. Le prof disparaît. Silence complet. Enfin, un brave se lève, regarde par la fenêtre et aperçoit le professeur deux étages plus bas, les quatre fers en l'air dans les arbustes, mais heureusement sans blessure. » Le summum de l'illustration, vous direz.

Enfin, rappelons que l'humour dans nos réponses ajoute souvent du piquant. Howard Eves [1] nous en offre de bons exemples, dont celui-ci: « Un étudiant pose une question d'une nullité béante pendant un cours. Le prof, soucieux de rester à la fois diplomate, mais franc, regarde tout droit le sommet de la tête de l'étudiant et dit "You know, you have a point there" (un calembour qui résiste la traduction!).

Références

1. Howard Eves, *Mathematical Circles Revisited*, n° 189. MAA, 2003.
2. Steven G. Krantz, *Mathematical Apocrypha*, page 6, MAA, 2002.



Letters to the Editors Lettres aux Rédacteurs

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BOOK REVIEW A Wealth of Basic Graph Theory and Algorithms

Graphs, Algorithms and Optimization

by William Kocay and Donald L. Kreher
Chapman and Hall/CRC, 2005, 483 pp

Review by Wendy Myrvold, Department of Computer Science, University of Victoria

If you are looking for a book on graph theory, the current classic (replacing Bondy and Murty's book on Graph Theory and Its Applications) is Doug West's Introduction to Graph Theory. For graph algorithms, there are many popular choices. The book under review is the first making an attempt to give an equal mixture of both classical graph theory and graph algorithms.

It is best suited for a class at the fourth year or graduate level which could include both computer science and mathematics students. There are many ways to structure a class using this book. An instructor could pick and choose favorite topics, emphasize the graph theory aspects or focus on algorithms.

The first chapter gives a very quick introduction to graph theory and algorithm analysis. A mature student could get by with the material presented on these topics. However, it would be preferable if students had classes in elementary data structures (linked lists, stacks, queues, adjacency matrices and adjacency lists), algorithm analysis (Big Oh notation) and also an introduction to graph theory, before taking a class taught with this as a text.

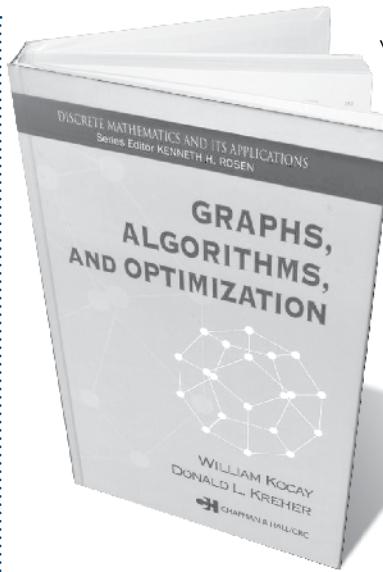
Chapter two starts with a very simple union-find algorithm for testing connectivity and then provides a more advanced approach which uses a collapsing find (the complexity for this is referenced but not proven). Then several alternatives are given for the Shortest Path problem. As is done in several other places, alternative implementations of data structures are sometimes given in order to reinforce the algorithm analysis skills of the students - both an $O(n \log n)$ and an $O(n)$ algorithm for heap creation are presented and analysed.

Chapter 3 covers some special classes of graphs including bipartite graphs and line graphs, and discusses Euler tours. I especially enjoyed the treatment of Moore graphs and the eigenvalue argument used to make conclusions regarding their existence.

Chapter 4 has a very brief coverage of fundamental cycle bases and fundamental cutset bases. Three algorithms for minimum weight spanning tree are presented and analysed - Kruskal's, Prim's and also the Cheriton-Tarjan algorithm which uses a leftist binary tree data structure.

Chapter 5 has algorithms for generating trees and the famous matrix-tree theorem for counting spanning trees using a determinant computation.

Chapter 6 describes how to use DFS to find the blocks (2-



vertex connected components) of a graph, an important pre-processing step for many graph algorithms (in particular, algorithms for embedding graphs on surfaces).

Chapter 7 includes the classical theorems for maximum matchings of a graph. It has an algorithm for finding a maximum matching in a bipartite graph. The significantly more complex blossom finding algorithm of Edmonds for graphs which are not bipartite is not included (but is referenced in the notes at the end).

Chapter 8 is a basic introduction to network flows which includes the Ford-Fulkerson algorithm and the Max-flow-min-cut theorem. The chapter concludes with Menger's theorem and its applications for finding disjoint paths.

Chapter 9 introduces the famous Hamilton Cycle problem. A quick introduction to the theory of NP-completeness is given. The result that SAT is NP-complete is referenced (trying to give a proof would be beyond the scope of this book).

The problems 3-SAT, Vertex Cover and Hamilton Cycle are proven to be NP-complete. This chapter also includes the Travelling Salesman problem and algorithms for both this and Hamilton Cycle. The section on NP-completeness could easily be skipped (and just the algorithms covered). If a more detailed coverage of NP-completeness is desired, Garey and Johnson's book would be an excellent additional reference.

Chapters 8 on network flows and Chapter 10 are the only two chapters to consider directed graphs. Some topics in this section are topological sorting, strong components, tournaments, and using directed graphs to create a polynomial time algorithm for 2-SAT (used with the projective plane embedding algorithm in Chapter 13).

Chapter 9 has a sampling of graph colouring topics which includes several classical theorems, the definitions of colour critical graphs and the chromatic polynomial. Three other problems (3-colouring, Clique and Chromatic Index) are shown to be NP-complete.

Chapters 12 introduces planar graphs, Kuratowski's theorem, and planar duality. The platonic solids and polyhedra are briefly mentioned in section 12.7. These topics are classical topics in geometry but often receive no mention in graph theory

texts. The Four Colour Theorem and a brief outline of its proof are given. This book then presents the linear time algorithm of Hopcroft and Tarjan (I prefer to teach the $O(n^2)$ algorithm of Demoucron et al. as it is much easier for students to master — programming the Hopcroft and Tarjan algorithm is a major undertaking). The notes have very interesting historical detail including a brief mention of graph minor theory.

Chapter 13 is a very authoritative treatment of graph embeddings on other surfaces with concentration on the torus and the projective plane. While most chapters in this book are independent, I would strongly recommend covering Chapter 12 before attempting Chapter 13. Their treatment of this topic is much more accessible to graph theorists and programmers than the standard references on topology.

The last three chapters cover linear programming with some applications to graph algorithms. These can safely be omitted but if included, an elementary class in linear algebra is a critical prerequisite. The material in these chapters is quite dense. One beautiful result included in section 16.4 is that the linear programming solutions for some problems such as Shortest Path and Maximum Flow turn out to provide the desired integral solutions because the constraint matrices are totally unimodular. If a slower treatment with many more examples is preferred,

I would highly recommend the text Linear Programming by Chvatal (while quite old and in need of some updating regarding the non-Simplex approaches to linear programming, this book has the most intuitive presentation of linear programming that I have seen because of its use of dictionaries instead of tableaus as a representation of the problems).

In summary, the book Graphs, Algorithms and Optimization contains a wealth of basic graph theory and graph algorithms material. The algorithms presented were chosen for their beauty, usefulness and simplicity. They may not always be the theoretically fastest ones, but good strategies for algorithm design are illustrated throughout. The pseudocode in the book would greatly facilitate programming these algorithms.

For the many graph theory problems, the background is presented in a clear and accessible manner and this book would be a good starting point for the basics before searching out research monographs and journal papers in these areas. The authors have done an excellent job in selecting from the many known results in graph theory the ones which are the true gems. The main difficulty if using it in teaching would be the decisions on what to include and what to leave out since there is much more material than you can expect to cover in one class.

NSERC - CMS Math in Moscow Scholarships

The Natural Sciences and Engineering Research Council (NSERC) and the Canadian Mathematical Society (CMS) support scholarships at \$9,000 each. Canadian students registered in a mathematics or computer science program are eligible.

The scholarships are to attend a semester at the small elite Moscow Independent University.

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Date limite le **31 mars 2008** pour le trimestre d'automne 2008.



Mathematics and the Aesthetic: New Approaches to an Ancient Affinity

edited by Nathalie Sinclair, David Pimm
and William Higginson (eds)
CMS Books in Mathematics 25,
Springer 2006 xv + 288 pp

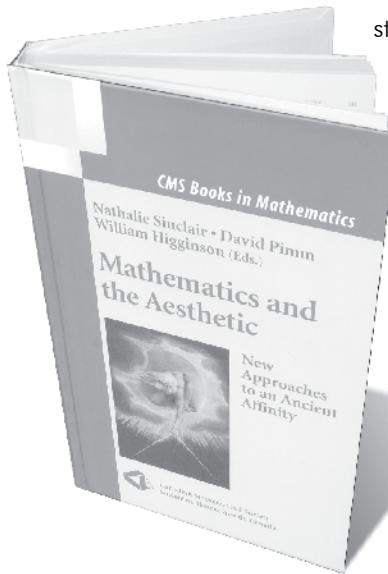
Review by Klaus Hoechsmann, University of British Columbia

When art, some 250 years ago, turned its back on the sublunar world to ascend toward the sacred, mathematics was left behind with the surveyors and bean-counters, where the sublime rarely visits. Since some of its admirers — such as readers of London's *Ladies' Diary* almanac — kept reporting encounters with beauty on its terrain, scholars began to ponder this unusual "affinity". You need only imagine titles like "Music and the Aesthetic" to see the impossibility of exploring such an elusive topic in a single slender volume — especially one aimed at readers intrigued by that strange juxtaposition.

Such quixotic venture must fail by the norms of discourse among the well-informed, and hence, in order to do more than confirm this predictable failure, I would have to remove myself from the ranks of the latter, were I not luckily outside already. I am glad to have the book on my shelf — if only for its great collection of non-standard quotes, its mathematical conversation starters, and its range of opportunities for the reader to jump in: checking contexts of quotes, wrestling "well-known" results, improving proofs, refuting arguments, and quarrelling with conclusions.

It is divided into three sections, each comprising three essays, with prologue and epilogue (Chapters Alpha and Omega) written by two editors of the collection. Alpha must, of course, open the gates and therefore wend its way past jaded statues of stalwarts from Pythagoras to Escher, but even here we do not have to wait long to find unusual tidbits, like Plato's praising the beauty of the bare straight line, a couple of Christian and Islamic warnings against our art, and an eloquent passage by John Dee, which neatly positions it in the cosmos of the 16th century. Maybe the greatest merit of Chapter Alpha is that it quietly establishes the "aesthetic" as concerning (like the anesthetic) all forms of perception, including purely mental ones.

Section A is about aesthetic "buzzes" (cf. page 25) experienced by working mathematicians. Jonathan Borwein leads off con brio, with deep "classical" theorems illustrating the mysterious symbiosis of the discrete and the continuous, or proving facts beyond present computational reach. He also displays pictures which enlighten or deceive, as the case may be, with stunning clarity. As an expert in experiments with computers, he is well placed to assess their role in mathematics — when he wonders, for instance, if the glories of the past "would have been helped or impeded by [today's] facile computation" — the stress being on "facile", since the fecundity of computation has been amply demonstrated (cf. Gauss). He finishes with several success



stories for modern computers, the most remarkable and beautiful taken from pi-hunting. For laymen, he includes a couple of elementary proofs, whose aesthetic buzz might, however, be muted by their gaps.

Chapter 2, by Doris Schattschneider, is a graceful andantino, with inversion at a circle as its only deus ex machina. She usefully distinguishes between beautiful theorems, beautiful

proofs, and the aesthetic first category, after Euler's exponential formula for -1, she places two ancient results: the Archimedean 1-2-3 relation of cone-sphere-cylinder volumes and the still older Pythagorean theorem (a.k.a. *hsuan-thu*, etc.). Which three theorems might she have chosen instead? The subsection on beauty in proofs begins just as modestly, but I got hung up on wondering how Euclid's famous "wind-mill" proof of *hsuan-thu* could "almost without change" serve to prove the theorem of Pappus depicted on page 45 (hint: underline "almost"). After explaining seven strategems sometimes useful in proofs (think "pigeon-hole"), she at last describes some of her own work on tilings to illustrate the private satisfactions and frustrations of actually doing mathematics. The chapter ends with a haiku about the latter.

Inversion at a circle also looms in Chapter 3, behind the Peaucellier linkage — which solved a stubborn mechanical problem so elegantly that none other than Lord Kelvin called it the most beautiful thing he had ever seen. To understand its diagram on page 78, I would recommend erasing the point B plus appendages and staring at the midpoint of the rhombus. Together with the self-explanatory Reuleaux triangle, this fills most of the chapter's fourth and final part. In the third part, hands-on pieces of an approximate hyperbolic plane are depicted and explored, one tiled by irregular polygons (hexa and hepta), the rest crotched, following an unexplained but explicit recipe by William Thurston. The second, less tactile part probes the intuitive meanings first of undefined terms and then of proofs, pitting a slick visual "proof" of a numerical discovery by Galileo against formal arguments, in Euclid's or Klein's court, respectively, to establish the "obvious" equality of opposite angles in a cross. The Chapter opens with a brief account of the personal journeys between geometry and visual art of the two authors, David Henderson and Daina Taimina.

In Chapter 4, the first one of Section B, Nathalie Sinclair bravely tries to identify the evaluative, generative, and motivational aspects of mathematical aesthetics. Surely they must exist

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Vector Calculus

by Miroslav Lovric
The MAA Tercentenary Euler Celebration
Wiley 2007, xiv + 623 pp

In writing this textbook, intended to be accessible to students who have completed a full year of calculus, the author has been guided by pedagogical imperatives such as: use a variety of approaches to a new topic; add excitement by giving applications from other disciplines; provide more examples for more difficult material; and revisit concepts as often as possible.

The material covered — plenty for a full course — is what might be expected in a book with this title: relevant topics from linear algebra, differential calculus of functions of several variables, vector-valued functions and vector fields, integration along paths, multiple integrals, integration over surfaces, and the classical integration theorems of vector calculus. Theorems are stated carefully, but the proofs are usually given only for special cases. There are numerous exercises at the end of each section, and each chapter ends with a carefully thought-out review, combining a chapter summary, review questions, a true/false quiz, and a set of review exercises. Two appendices cover the proofs of some of the differentiation theorems, and the answers to the odd-numbered exercises.

Theory of Finite Simple Groups

by Gerhard O. Michler
New Mathematical Monographs 8
Cambridge 2006, 662 pp \$165 US (hardcover)

From the author's introduction: "This book presents an almost self-contained introduction to the theory of abstract finite (non-abelian) simple groups, which together with the cyclic groups of prime order are the building blocks of all finite groups. The theory developed here has concrete applications. In particular, it yields the theoretical and algorithmic background for uniform existence and uniqueness proofs of the (known) sporadic simple groups." The book takes its inspiration from the Brauer-Fowler Theorem, which states that for a given group H of even order, there are only finitely many simple groups G which possess an involution z with centralizer isomorphic to H . The author's algorithm constructs, as matrix groups over finite fields, all finite simple groups G having a 2-central involution z with centralizer H .

The discussion assumes the content of a first-year graduate course in algebra and, for the study of explicit examples, some experience with the computer algebra systems GAP and MAGMA, as well as some familiarity with the "Handbook of Computational Group Theory", by D.F. Holt et al (Chapman & Hall/CRC 2005). The book includes a DVD containing "documentation of M. Weller's existence proof of the Thompson group."

The Cat in Numberland

by Ivar Ekeland
Cricket Books, Carus Publishing, Chicago 2006
60 pp \$19.95 US

How can a hotel always have room for more guests, even when all the rooms are occupied? It can if it's the Hotel Infinity, the one run by Mr and Mrs Hilbert in the far-away place called Numberland. In this small book the author and his illustrator, John O'Brien, explore for young readers some of the paradoxes of the infinite. Their inspiration is of course the famous hotel imagined by David Hilbert. The hotel cat, who doesn't seem to have a name, observes the arcane goings-on in the hotel and loses more and more sleep as it tries to fathom what is happening. When the army of fractions turns up and is somehow accommodated, it is too much for the cat, who emigrates to Corsica and takes up residence in a small (finite!) hotel.

Pursuit of Genius: Flexner, Einstein, and the Early Faculty at the Institute for Advanced Study

by Steve Batterson
A.K. Peters 2006, 314 pp \$39 US (hardcover)

"In 1933 the New Jersey community of Princeton abruptly replaced Göttingen as the world's leading center for mathematical research. This sudden transfer of mathematical prestige was a consequence of the diverse aspirations of two laymen: Adolf Hitler and Abraham Flexner." With these sentences Steve Batterson opens his carefully-researched and absorbing account of the founding and early years of the IAS.

Flexner was the founding director, and the early chapters of the book give us his story. He came to public notice with the publication in 1910 of his study, for the Carnegie Foundation, of the wide-spread inadequacies of US and Canadian medical education. This led to work with John D. Rockefeller's General Education Board, selecting medical programs for assistance, and then to assisting the Bamberger family – Newark department store magnates – with their philanthropic activities. Flexner had made a study of higher education, both in Europe and America, and had become convinced of the need for a university devoted to research and graduate education. Thus was born the IAS, which opened its doors in 1933 with a faculty of two, Oswald Veblen and Albert Einstein.

Later chapters deal with the establishment of the School of Economics and Politics and the School of Humanistic Studies, and with the unwilling retirement of Flexner. The tenures of his successors, Frank Aydelotte (1939-46) and Robert Oppenheimer (1947-66), are covered briefly in a final chapter. Some 35 pages are devoted to endnotes, references and an index.

Mathematics Seminars for Teachers of Mathematics

Dean Murray, Centre for Education in Mathematics
and Computing, University of Waterloo

The summer of 2007 marked the fifth summer of collaboration between the Centre for Education in Mathematics and Computing at the University of Waterloo and the Imperial Oil Foundation in the running of the Summer Institutes for teachers of mathematics in grades 9 to 12. For the third time, simultaneous workshops were offered for teachers in grades 7 and 8; these were sponsored by the Waterloo Mathematics Foundation. The workshops took place over three days in August.

The focus of the summer institute was the integration of problem solving into the secondary mathematics curriculum, with and without the use of such technology as graphing calculators and computer software. The sessions were direct to those teaching at the "Academic" and "University preparation" levels of the Ontario curriculum. Faculty of the University of Waterloo, enthusiastic and experienced secondary school teachers, and a retiree presented the sessions along with a senior manager from Research in Motion who spoke on the Wireless Industry.

Fifty-nine secondary teachers together with many of the speakers and staff attended each of the workshops. We were very pleased to have present six teachers from abroad, from Trinidad and Tobago, Ireland, Turkey and the United States of America. There is much continued interest in these seminars, as we keep a "wait list" made up of teachers who registered after the workshops filled up.

There were forty-one teachers registered for the Grades 7 and 8 workshops, including a teacher from China. These teachers of Grades 7 and 8 shared four sessions with the Grade 9 to 12 teachers (including three evening sessions), as well as meals, accommodation, socials and a games night. One of the evening sessions had groups of teachers discussing topics that they share in the curriculum. There was also time to hear from some of the delegates about their countries and educational systems. Their talks were very interesting and led to conversation among the delegates afterwards. Those who stayed after the last breakfast had the option of taking an informative sightseeing trip around Waterloo country and learning more about its rural areas and the traditions of the Mennonite families.

Survey results

Many of the delegates returned an evaluation form. Ninety-eight per cent replied that the workshops met their expectations and that they would recommend the experience to other teachers. The following is a sample of their specific comment:

Would you recommend this experience to other teachers?

From Grade 7 and 8 teachers:

- Great workshop. Great price! Fun. Came home with lots of resources.
- Useful information. Great resources distributed, confidence building especially for new Math/Science teachers.
- The course has given me more confidence.
- A teacher would benefit from this experience.

From Grade 9 to 12 teachers:

- It is a great opportunity to grow as a math educator (great PD).
- Absolutely. Probably the best PD in the summer time. It revitalizes and makes you think more.

- The UW faculty who addressed us was extremely animated and clearly passionate about math.
- It is a fabulous PD opportunity for teachers - relevant, timely, topical and fun.

Did the workshops meet youth expectations?

From Grade 7 and 8 teachers:

- Excellent information, hands on activities involving collaboration.
- It helped focus my thoughts towards creative curriculum delivery.
- Great ideas to help me get started/how to do it (implement).
- Provides motivation and great ideas for new school year.

From Grade 9 to 12 teachers:

- Ideas get ready for back to school mode.
- Informative, active and captivating.
- Fantastic opportunity to obtain new ideas and liaise with other teachers.
- There was a nice balance between curricular and enrichment materials.

The continuing success of the Summer Institute for Teachers of Mathematics would not be possible without the support of our sponsors. These seminars help to spread the interest and love of mathematics throughout Canada and other countries. We are pleased to announce that similar workshops are scheduled for Monday, August 18 to Wednesday, August 20, 2008.

A lust for mathematics

George Gadanidis, Faculty of Education
University of Western Ontario

ggadanid@uwo.ca

<http://publish.edu.uwo.ca/george.gadanidis>

The mathematician does not study pure mathematics because it is useful; he studies it because he delights in it, and he delights in it because it is beautiful. Henri Poincaré.

"Lust" and "mathematics" may at first seem to be an incongruous combination. In fact, many people in our society might replace "lust" with "fear" or "hate". But let us put common conceptions aside and explore math lust. The word "lust" has many meanings; in this mathematical context, we equate lust with "an ardent enthusiasm or zest", as in "a lust for life".

An argument can be made that we are born with an ardent enthusiasm for mathematics. Papert (1988) suggests that young children enter school mathematically curious, imaginative and capable, and that they have to learn to be otherwise. Ginsburg (2002, p. 13), who has studied young children doing mathematics, suggests that, although "mathematics is big", children's minds are bigger. He argues that "children possess greater competence and interest in mathematics than we ordinarily recognize".

Paraphrasing the title of one of Ellen Dissanayake's books, *Homo Aestheticus*, where she claims that humans, both as individuals and societies, actually need — biologically require — the arts, perhaps we can also refer to ourselves as *Homo Mathematicus*. Here is how Molly Peacock expresses this idea, in her poem *Math Lust*:

But we want
and we need
our mathematical lust.
It's our imagination
our numerical trust:
It's the raining of ideas
till they're five or nine or three.

It's the juice of numbers
in you, in me
all unencumbered.

A reading of this poem by Molly Peacock is available at
<http://www.edu.uwo.ca/dmp/peacock>.

If mathematics is an object of lust, it is certainly not recognized as such by the general public. In a recent interview (available at the same website), Peacock suggests that mathematics and poetry share a common predicament of being marginalized in society and typically confined to classrooms or to communities of mathematicians and poets, respectively. Keeping mathematics within the confines of classrooms and communities of mathematicians will not likely change the view of the general public about the subject. How do we traverse these boundaries? How do we bring the beauty of mathematics to the wider world?

At the moment we are exploring two ideas at the Fields Institute that seek to bring mathematics to a wider audience: to be experienced, to be understood, to be appreciated for its beauty. The first comes from Molly Peacock's *Poetry in Motion* project, where poetry is brought to millions of commuters through poetry posters in subway trains, in cities like Toronto and New York. Along these lines, mathematics posters were created to celebrate the World Mathematical Year 2000, and placed in public transportation vehicles in cities around the world. More posters may be seen at <http://wmy2000.math.jussieu.fr/posters.html>.

The second is the idea of a Mathematics Performance Contest, where videos of students' mathematical performances are posted on the Web and adjudicated by mathematicians, mathematics educators and public figures, based on the complexity of mathematical ideas, the level of imaginative thinking, and the quality of the

performance. One example of a mathematical performance can be seen at

<http://www.edu.uwo.ca/mathscene/T/mathematician.html>, which is a music video of a song called "I'm a mathematician" based on the work of Lindi Wahl, an applied mathematician at the University of Western Ontario. Another example is available at

<http://www.edu.uwo.ca/dmp/IamToo>, which is a Grade 4 classroom performance of the song "I am Too" about shapes and their properties.

An elementary school teacher once commented, after taking a mathematics course for teachers, that she realized that mathematics "can be discussed with your family and friends just like you would a favourite book or new movie". Creating opportunities for others to see mathematics in this way would help all of us better appreciate the deeply human activity that is mathematics (Higginson, 2006). Subway and bus posters and web-based mathematics performance contests offer two opportunities for bringing the beauty of mathematics into public spaces, and potentially helping it be seen as an object of math lust.

References

1. Ginsberg, Herbert G. (2002). Little children, big mathematics: *Learning and teaching in the pre-school. Proceedings of the 26th Conference of the International Group for the Psychology of Mathematics Education*, (Volume 1, pp. 3-14). University of East Anglia, 2002.
2. Higginson, W. (2006). *Mathematics, aesthetics and being human*. In N. Sinclair, D. Pimm & W. Higginson (editors), *Mathematics and the aesthetic: Modern approaches to an ancient affinity* (pp. 126-142). Springer-Verlag, New York.
3. Papert, S. (1980). *Mindstorms: Children, Computers, and Powerful Ideas*. Basic Books, New York.

Call for Mathematics – ATOM A Taste of Mathematics

The booklets in the series, ATOM, are designed as enrichment materials for high school students with an interest in and aptitude for mathematics. Some booklets in the series will also cover the materials useful for mathematical competitions.

So far, seven volumes have been published - Volume I, Problems from the Olympiad Correspondence Program; Volume II, Algebra - Intermediate Methods; Volume III Inequalities; Volume IV, Problems for Mathematics Leagues, Volume V, Combinatorial Explorations, Volume VI, Problems for Mathematics Leagues, II, and Volume VII, Problems of the Week. There are two manuscripts under active consideration on Problems for Mathematics Leagues, III, and Homework, the CAUT Problems.

The Editorial Board is interested in receiving proposals for future volumes, either as a specific proposal or as a manuscript. Submitters should note that the booklets are relatively short, not exceeding 64 pages in length. So far we have published only in English because of perceived sales demand.

All proposals and manuscripts should be sent to the

Demande de manuscrits - ATOM Aime-T-On les Mathématiques

Les Livrets de la collection ATOM sont destinés au perfectionnement des étudiants du secondaire qui manifestent un intérêt et des aptitudes pour les mathématiques. Certains livrets de la collection ATOM servent également de matériel de préparation aux concours de mathématiques sur l'échiquier national et international.

À ce jour, sept tomes ont été publiés - tome I, Problems from the Olympiad Correspondence Program; tome II, Algebra - Intermediate Methods; tome III, Inequalities; tome IV, Problems for Mathematics Leagues; tome V, Combinatorial Explorations; tome VI, Problems for Mathematics Leagues, II; tome VII, Problems of the Week. Deux manuscrits sont en outre à l'étude, l'un sur la théorie des nombres, l'autre sur la trigonométrie (Problems for Mathematics Leagues, III et Homework, the CAUT Problems).

Le Conseil de rédaction sollicite vos propositions pour des livrets à venir, sous la forme d'une proposition détaillée ou d'un manuscrit. Mentionnons que les livrets sont des publications courtes (64 pages maximum). Nous ne les avons publiés qu'en anglais jusqu'à présent en raison de la demande estimée.

Faites parvenir vos propositions ou manuscrits au

Bruce Shawyer, Editor-in-Chief / Rédacteur en chef

Department of Mathematics
Memorial University of Newfoundland
St. John's, NF
Canada A1C 5S7
email atom@math.mun.ca / par courriel à atom@math.mun.ca.

EMPLOYMENT OPPORTUNITY

LAURENTIAN UNIVERSITY / UNIVERSITÉ LAURENTIENNE

SHARCNET RESEARCH CHAIR (AD #27)

The Department of Mathematics and Computer Science at Laurentian University invites applications for a probationary tenure-track faculty position as a SHARCNET Chair in Mathematical and Computational Materials Science to commence on July 1, 2008, subject to final budgetary approval.

The Chair will facilitate the development of new computation-based materials science research projects in collaboration with other members in the Faculty of Science and Engineering, especially in areas of relevance to mining, mineral sciences and products derived from mineral processing. These may include (but are not limited to) the mathematical modeling of material structures, interfaces, interfacial processes, and the mechanical properties of materials.

The proposed Chair is expected to possess experience in mathematical modeling, in the development of visualization techniques, and have expertise in computational aspects of materials science and/or engineering. The Chair will be expected to participate in the development of the proposed MSc in Computational Sciences and PhD in Materials Science programs, thus strengthening the collaboration potential between the Department of Mathematics and Computer Science and other departments of the Faculty of Science and Engineering. The Chair will likely be cross-appointed with at least one other department in the Faculty (Chemistry and Biochemistry, Physics, Engineering and Earth Sciences), depending on the background and academic interests of the individual. The successful candidate will show leadership and innovation in research and teaching.

Applicants are expected to have a Ph.D. or equivalent, demonstrated excellence in research and excellent teaching skills. Postdoctoral experience is an asset. The successful applicant will be expected to initiate and lead an independent research program, and participate in interdisciplinary research with material science group. The successful candidate will demonstrate excellence or promise of excellence in teaching and graduate supervision, and will be expected to develop a vigorous, externally-funded research program. Information about the faculty of science and engineering and areas of research can be found at the website:

<http://scienceandengineering.laurentian.ca/>

The position of the SHARCNET Chair is funded for two years by SHARCNET, which has developed a network of high-performance computer clusters spanning 16 academic institutions in Ontario. Please see www.sharcnet.ca for more information.

In accordance with the University's policy on Bilingualism, Laurentian has a requirement of passive bilingualism (French/English) as a condition of tenure.

Laurentian University (LU) is located in Sudbury, an attractive modern city offering unique cultural, recreational, and educational opportunities. For further information see
<http://www.sudburytourism.ca>

Candidates should forward a cover letter specifying the ad#, recent curriculum vitae, including a list of publications and a statement of research interests and teaching philosophy and also arrange for three letters of reference to be sent directly to the address below or emailed to asr@laurentian.ca. Review of completed applications will begin **January 15, 2008**. The position remains open until filled.

Harley d'Entremont
Laurentian University
Sudbury, Ontario
Canada P3E 2C6

Laurentian is committed to equity in employment and encourage applications from all qualified applicants, including women, aboriginal peoples, members of visible minorities and persons with disabilities. All qualified candidates are encouraged to apply, however Canadian citizens and permanent residents will be given priority.

LU faculty is part of the LUFA (Laurentian University Faculty Association), information and the Collective Agreement can be found at www.lufapul.ca

NEWS FROM THE FIELDS INSTITUTE

The 2008 Winter/Spring thematic program at the Institute will be *New Trends in Harmonic Analysis*, organized by Alex Iosevich (University of Missouri-Columbia), Izabella Laba (UBC, lead organizer), Michael Lacey (Georgia Institute of Technology) and Eric Sawyer (McMaster University).

Information: thematic@fields.utoronto.ca
www.fields.utoronto.ca/programs/scientific/07-08/harmonic-analysis/

The Coxeter Lecture Series will be given by Jill Pipher (Brown) on February 25-27, and Tim Gowers (Cambridge) will deliver the Distinguished Lecture Series in the latter half of March.

Workshops in the program:

February 18–24: *Harmonic Analysis*
www.fields.utoronto.ca/programs/scientific/07-08/harmonic-analysis/harmonic/

April 5–13: *Clay-Fields Conference on Additive Combinatorics, Number Theory, and Harmonic Analysis* (Co-organized with the Clay Mathematics Institute)
www.fields.utoronto.ca/programs/scientific/07-08/harmonic-analysis/combinatorics/

Other events:

May 11–13: Carleton Graph Theory Workshop (at Carleton University)
www.fields.utoronto.ca/programs/scientific/07-08/graph-theory/

May 20–23: Workshop on Taylor Model Methods,
www.fields.utoronto.ca/programs/scientific/07-08/taylor-model/

May 21–23: Symposium on Dependent Data Structures (at Carleton University)
www.fields.utoronto.ca/programs/index.html?2008-05

June 30–July 11: Summer School in Analytic Number Theory and Diophantine Approximation (at the University of Ottawa)
www.fields.utoronto.ca/programs/scientific/07-08/analytic/

July 1–August 31: Thematic Program on Mathematical and Quantitative Oncology,
www.fields.utoronto.ca/programs/scientific/08-09/mathoncology/

09/mathoncology

July 13–18: Canadian Number Theory Association X Meeting (at the University of Waterloo)
www.fields.utoronto.ca/programs/scientific/08-09/CNTAX/

July – August, 2008: *Mathematical and Quantitative Oncology*,

Information: thematic@fields.utoronto.ca
www.fields.utoronto.ca/programs/scientific/08-09/mathoncology/

Workshops in this program:

July 30–August 2: Society for Mathematical Biology (SMB) Conference (Hosted by the Centre for Mathematical Medicine (CMM) at the Institute)
www.fields.utoronto.ca/programs/scientific/08-09/mathoncology/

August 2–6: VICBC Summer School on Integrative Cancer Biology

www.fields.utoronto.ca/programs/scientific/08-09/mathoncology/

Future thematic programs:

September – December, 2008: *Arithmetic Geometry, Hyperbolic Geometry and Related Topics*
Information: thematic@fields.utoronto.ca
www.fields.utoronto.ca/programs/scientific/08-09/arith_hypergeo/

January – June, 2009: *o-Minimal Structures and Real Analytic Geometry*

Information: thematic@fields.utoronto.ca
www.fields.utoronto.ca/programs/scientific/08-09/o-minimal/

January – June, 2010: *Financial Mathematics*

For more information on this program, and any other thematic programs, contact us at thematic@fields.utoronto.ca. Complete and up-to-date information on all Fields Institute activities can be found at
www.fields.utoronto.ca. You can subscribe to our mailing list of Fields Institute activities at
www.fields.utoronto.ca/maillist.

NEWS FROM DEPARTMENTS / NOUVELLES DU DÉPARTEMENT

University of Manitoba, Winnipeg, MB

Promotions:

J. Chipalkatti, associate professor, Mar, 30, 2007

Visitors:

S. G. Mohammed (Univ. Putra Malaysia) Jul-Dec 07; José Gale (Zaragoza; functional analysis); Jul 07; V. Koubek (Charles Univ.) Aug-Sep 07; E. Bashkirov (Belorussian State Univ.; group theory) Sep-Oct 07; and H. Huang (York; applied & computational math) Sep 07.

University of British Columbia, Vancouver, BC

UBC Okanagan now offers graduate degrees in Mathematics at both the MSc and PhD level.

For information:

<http://web.ubc.ca/okanagan/msp/welcome.html>

CALL FOR NOMINATIONS / APPEL DE MISES EN CANDIDATURE

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

Le Comité de recherche de la SMC lance un appel de mises en candidatures pour trois de ses prix de conférence. Ces prix ont tous pour objectif de souligner l'excellence de membres de la communauté mathématique canadienne.

Prix Coxeter-James Prize Lectureship

2009

The Coxeter-James Prize Lectureship recognizes young mathematicians who have made outstanding contributions to mathematical research. The selected candidate will deliver the prize lecture at the Winter Meeting.

The recipient shall be a member of the Canadian mathematical community. Nominations may be made up to ten years from the candidate's Ph.D.: researchers having their PhD degrees conferred in 1998 or later will be eligible for nomination in 2008 for the 2009 Coxeter-James prize. 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.

Le prix Coxeter-James rend hommage aux jeunes mathématiciens qui se sont distingués par l'excellence de leur contribution à la recherche mathématique. La personne choisie prononcera sa conférence à la Réunion d'hiver.

Cette personne doit être membre de la communauté mathématique canadienne. Les candidats sont admissibles jusqu'à dix ans après l'obtention de leur doctorat : ceux qui ont obtenu leur doctorat en 1998 ou après seront admissibles en 2008 pour le prix Coxeter-James 2009. Toute mise en candidature est modifiable et demeurera active l'année suivante, à moins que la mise en candidature originale ait été faite la 10e année suivant l'obtention du doctorat.

Prix Jeffery-Williams Prize Lectureship

2010

The Jeffery-Williams Prize Lectureship recognizes mathematicians who have made outstanding contributions to mathematical research. The prize lecture will be delivered at the Summer Meeting. The recipient shall be a member of the Canadian mathematical community. A nomination can be updated and will remain active for three years.

Le prix Jeffery-Williams rend hommage aux mathématiciens ayant fait une contribution exceptionnelle à la recherche mathématique. La personne choisie prononcera sa conférence à la Réunion d'été. Cette personne doit être membre de la communauté mathématique canadienne. Toute mise en candidature est modifiable et demeurera active pendant trois ans.

Prix Krieger-Nelson Prize Lectureship

2010

The Krieger-Nelson Prize Lectureship recognizes outstanding research by a female mathematician. The prize lecture will be delivered at the Summer Meeting. The recipient shall be a member of the Canadian mathematical community. A nomination can be updated and will remain active for two years.

Le prix Krieger-Nelson rend hommage aux mathématiciennes qui se sont distinguées par l'excellence de leur contribution à la recherche mathématique. La lauréate prononcera sa conférence à la Réunion d'été. La lauréate doit être membre de la communauté mathématique canadienne. Toute mise en candidature est modifiable et demeurera active pendant deux ans.

The deadline for nominations is **June 30, 2008**. Nominations and reference letters should be submitted electronically, preferably in PDF format, by the appropriate deadline, to research-prizes@cms.math.ca.

La date limite de mises en candidature est le **30 juin 2008**. Veuillez faire parvenir les mises en candidature et lettres de référence par voie électronique, de préférence en format PDF, avant la date limite à : prix-recherche@smc.math.ca

Nominators should ask at least three referees to submit letters directly to the Chair of the CMS Research Committee by September 30, 2008. Some arms length referees are strongly encouraged. Nomination letters should list the chosen referees, and should include a recent curriculum vitae for the nominee, if available.

Les proposants doivent faire parvenir trois lettres de référence au président du Comité de recherche de la SMC au plus tard le 30 septembre 2008. Nous vous incitons fortement à fournir des références indépendantes. Le dossier de candidature doit comprendre le nom des personnes données à titre de référence ainsi qu'un curriculum vitae récent du candidat ou de la candidate, dans la mesure du possible.

Chair, Research Committee / Président, comité de recherches
CMS Prize Lectureships / Prix de conférence de la SMC
Department of Mathematics, University of Toronto
40 St. George Street
Toronto, Ontario M5S 2E4

The 2008 Krieger-Nelson and Jeffrey-Williams Prizes will be presented at the Second Canada-France Congress 2008 in Montréal, Québec, June 1-5.
Les prix Krieger-Nelson et Jeffrey-Williams 2008 seront présentés à la Deuxième congrès Canada-France 2008 à Montréal (Québec) du 1-5 juin.

CALL FOR NOMINATIONS / APPEL DE MISES EN CANDIDATURE

Prix Adrien-Pouliot Prize Lectureship

2008

Nous sollicitons la candidature de personnes ou de groupe de personnes ayant contribué d'une 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 au site Web de la SMC : www.cms.math.ca/Prix/info/ap. 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 2008**. Veuillez faire parvenir vos mises en candidature en six exemplaires à l'adresse ci-dessous :

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 using the Nomination Form available from the CMS Web site at: www.cms.math.ca/Prizes/info/ap. 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 last year can renew this nomination by simply indicating their wish to do so by the deadline date. In this case, only updating materials need be provided as the original has been retained. Nominations must be received by the CMS Office no later **April 30, 2008**. Please send six copies of each nomination to the address given below.

The Adrien Pouliot Award / Le Prix Adrien-Pouliot
Canadian Mathematical Society / Société mathématique du Canada
577 King Edward
Ottawa, Ontario K1N 6N5

Graham Wright Award for Distinguished Service Prix Graham-Wright pour service méritoire

2008

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 award is being renamed as of the 2008 competition, in recognition of Graham Wright, who will retire this year after serving 30 years as CMS Executive Director.

Nominations should include a reasonably detailed rationale and be submitted by **March 31, 2008**, to the address below.

En 1995, la Société mathématique du Canada a créé un prix pour récompenser les personnes qui contribuent de façon importante et soutenue à la communauté mathématique canadienne et, notamment, à la SMC. Ce prix sera renommé à compter de 2008 en hommage à Graham Wright, qui quittera la Société cette année après avoir occupé pendant 30 ans le poste de directeur administratif de la SMC.

Pour les mises en candidature prière de présenter des dossiers avec une argumentation convaincante et de les faire parvenir, le **31 mars 2008** au plus tard, à l'adresse ci-dessous :

Selection Committee / Comité de sélection
Graham Wright Award for Distinguished Service / Prix Graham-Wright pour service méritoire
Canadian Mathematical Society / Société mathématique du Canada
577 King Edward
Ottawa, Ontario K1N 6N5

The 2008 Adrien-Pouliot Award will be presented at the CMS Winter 2008 Meeting in Ottawa, ON, December 6 to 8.
Le prix Adrien-Pouliot seront présentés à la Réunion d'hiver 2008 de la SMC à Ottawa (Ontario), du 6 au 8 décembre.

CMS SUMMER 2009 MEETING / RÉUNION D'ÉTÉ 2009

Appel de sessions – Réunion d'été 2009 de la SMC Call for Sessions – CMS Summer 2009 Meeting

Additional self-supported sessions play an important role in the success of our meetings. We welcome and invite proposals for self-supported sessions for this meeting, taking place in early June 2009 in St. John's, Newfoundland. Proposals should include a brief description of the focus and purpose of the session, the expected number 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 in time blocks allocated by the Meeting Director. All sessions will be advertised in the CMS NOTES, on the web sites 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 on the web site and in the meeting programme. Those wishing to organize a session should send a proposal to the Meeting Director by the deadline below.

Les sessions complémentaires autonomes jouent un rôle important dans le succès de nos réunions. Nous vous invitons à proposer des sessions autonomes pour ce congrès qui se tiendra à St. John's (Terre Neuve) au début de juin 2009. Votre proposition doit inclure une brève description de l'orientation et des objectifs de la session, le nombre de communications prévues et leur durée, ainsi que le nom, l'adresse complète, le numéro de téléphone, l'adresse courriel et les autres coordonnées de l'organisateur. Ces sessions complémentaires seront intégrées aux autres sessions du programme, dans des cases horaires prévues à cet effet par le directeur de la Réunion. Toutes les sessions seront annoncées dans les Notes de la SMC, sur le site Web et, si possible, dans les Notices de l'AMS et les publications d'autres sociétés. Les conférenciers de ces sessions complémentaires devront présenter un résumé qui sera publié sur le site Web et dans le programme de la Réunion. Toute personne qui souhaiterait organiser une session est priée de faire parvenir une proposition au directeur de la Réunion avant la date limite indiquée ci-dessous.

Deadline: March 31, 2008
Date limite : 31 mars 2008

The following invited (partially funded) sessions have been confirmed for this conference:

Les sessions suivantes (partiellement subventionnées) ont été confirmées :

Combinatorial Designs and Related Topics

Designs combinatoires et sujets connexes

Org: Vaclav Linek (Winnipeg), Nabil Shalaby (Memorial)

Geometric Harmonic Analysis and Partial Differential Equations

Analyse harmonique géométrique et équations aux dérivées partielles

Org: Jie Xiao (Memorial)

Groups and Hopf Algebras

Groupes et algèbres de Hopf

Org: Yuri Bahturin, Mikhail Kotchetov (Memorial), David Radford (Illinois), Earl Taft (Rutgers)

Mathematical Physics

La physique mathématique

Org: Marco Merkli, Chris Radford (Memorial)

Nonlinear Dynamics and Applications

La dynamique non linéaire et ses applications

Org: Gail Wolkowicz (McMaster), Yuan Yuan, Xiaoqiang Zhao (Memorial)

Reaction-Diffusion Systems and Their Applications

Les systèmes de réaction-diffusion et leurs applications

Org: David Iron, Theodore Kolokolnikov (Dalhousie), Chunhua Ou (Memorial)

Meeting Director / Directeur de la Réunion

David A. Pike

Department of Mathematics and Statistics

Memorial University of Newfoundland

St. John's, Newfoundland, Canada A1C 5S7

dapike@math.mun.ca

WANTED: Books for Review RECHERCHÉS : Livres pour critiques littéraires

Have you written a book lately?

Would you like to see it reviewed in the CMS Notes? If so, please arrange to have a review copy sent to our Book Review Editor.

Vous avez récemment écrit un livre?

Vous aimeriez une critiques littéraires de celui-ci dans les Notes de la SMC? Si oui, veuillez faire parvenir une copie au rédacteur des critiques littéraires.

Peter Fillmore

Department of Mathematics and Statistics

Dalhousie University

Halifax NS B3H 3J5

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

Congrès Canada-France 2008 UQAM, Montréal 1-5 juin www.canada-france.math.ca

Les organismes suivants :

Centre de recherches mathématiques (CRM)
Institut Fields
Institut des sciences mathématiques (ISM)
Mathematics of Information Technology & Complex Systems (MITACS)
Pacific Institute for the Mathematical Sciences (PIMS)
Société canadienne de mathématiques appliquées et industrielles (SCMAI)
Société de mathématiques appliquées et industrielles (SMAI)
Société mathématique de France (SMF)
Société mathématique du Canada (SMC)
Université du Québec à Montréal (UQAM)

invitent les communautés mathématiques canadiennes et françaises au deuxième congrès Canada-France 2008.
Le congrès inclura les conférences annuelles de SCMAI et de MITACS, ainsi que la Réunion d'été de la SMC.

Les sessions scientifiques se tiendront du 2 au 5 juin, et la session de présentations par affiches, le 1er juin. Les réunions de travail commenceront le 31 mai. Nous vous invitons à participer aux activités sociales, dont la réception d'ouverture le 1er juin, le « social étudiant » le 2 juin, la réception et la cérémonie de remise des prix, le 4 juin.

Veuillez noter que la Société Française de Statistique (SFdS) et la Société statistique du Canada (SSC) tiendront un congrès conjoint à Ottawa juste avant ce congrès-ci, ce qui permettra à leurs participants d'assister aux deux événements.

Conférenciers pléniers

Yves André (CNRS-ENS, Paris)
Olivier Biquard (Strasbourg)
Luc Devroye (McGill)
Andrew Granville (Montréal)
Alice Guionnet (CNRS-ENS, Lyon)
Rick Kenyon (UBC)
Gérard Laumon (CNRS-Orsay)
Mary Pugh (Toronto)
Eric Sere (Paris-Dauphine)
Jean-Pierre Serre (Collège de France)
Nicole Tomczak-Jaegermann (Alberta)
Nizar Touzi (CREST-Paris)
Jianhong Wu (York)

Prix

Prix Arthur Beaumont pour service distingué de la SCMAI
à venir
Prix Cecil Graham pour thèse de doctorat de la SCMAI
à venir
Prix de recherche de la SCMAI
à venir
Prix Jeffery-Williams de la SMC
Martin Barlow (UBC)

Prix Krieger-Nelson de la SMC

Izabella Laba (UBC)

Prix d'excellence en enseignement de la SMC

à venir

Prix du concours de présentations par affiches de MITACS

à venir

Prix étudiants du Réseau MITACS

à venir

Conférence grand public

Yvan Saint-Aubin (Montréal)

Inscription

Les tarifs sont indiqués en dollars canadiens dans le tableau. Nous acceptons les paiements par chèque (dollars CAN ou US), VISA ou MasterCard. Le paiement doit nous parvenir au plus tard le 1er avril pour que vous ayez droit aux tarifs réduits; les inscriptions électroniques prennent fin le 15 mai. Les reçus seront remis sur place.

L'inscription donne droit à toutes les activités au programme, notamment :

- Écouter d'éminents conférenciers canadiens ou internationaux
- Assister à des sessions scientifiques
- Faire valoir la recherche étudiante en présentant une affiche
- Participer à des ateliers pour étudiants
- Se créer un bon réseau de contacts grâce à des activités diversifiées
- Assister à toutes les activités sociales, y compris la réception d'accueil.
- Les droits d'inscription des étudiants comprennent aussi un billet pour l'activité sociale des étudiants. Nous avons réduit les droits d'inscription pour stimuler la participation étudiante.

Avantages de la préinscription

- Tarifs réduits pour les personnes qui s'inscrivent avant le 1er avril.
- Votre nom figurera dans la liste des participants sur le site du congrès.
- Votre trousse d'inscription sera déjà prête à votre arrivée le dimanche soir.
- Vous n'aurez pas besoin de faire la file pour vous inscrire!

La programmation du congrès comprendra plusieurs minisymposia de la SCMAI. Les détails se trouvent sur le site du congrès et seront publiés dans les prochains numéros des Notes.

Communications libres

Org: Luc Bélair, François Bergeron (UQAM)

Nous lançons un appel de communications libres de 20

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

minutes chacune. Les résumés devront nous parvenir au plus tard le 15 avril 2008 (Veuillez utiliser le formulaire électronique au www.smc.math.ca/Reunions/ete08/abs/). Nous demandons à chacun de joindre au résumé le formulaire d'inscription et le règlement des frais pertinents. Pour faciliter la tâche des organisateurs, veuillez préciser la classification de sujets AMS 2000 (<http://www.ams.org/msc/>).

Session d'affiches

Nous incitons les étudiants et les chercheurs postdoctoraux à participer à la séance de présentations par affiches pour présenter leurs récents travaux et résultats. Il s'agit d'un excellent moyen de faire valoir auprès des médias, des professeurs et des étudiants de tous niveaux le genre de projets que mettent de l'avant nos chercheurs en sciences mathématiques. Les présentations par affiches seront évaluées pendant le congrès, et des prix attribués aux dix meilleures présentations. Les propositions de présentations doivent être soumises électroniquement au plus tard le 2 mai 2008.

Politique de remboursement

Les participants qui désirent annuler leur inscription doivent en aviser le Réseau MITACS <jrockwood@mitacs.ca> par écrit avant le 15 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.

Tarifs d'inscription (en \$ CAN)	Tarif réduit (avant le 1 ^{er} avril)	Tarif normal (1 ^{er} avril - 15 mai)	Sur place (après le 31 mai)
Conférencier primé, principal ou conférence grand public	0 \$	0 \$	0 \$
Participants avec fonds de recherche ou du secteur privé	250 \$	300 \$	350 \$
Participant sans fonds de recherche	100 \$	125 \$	150 \$
Étudiants, chercheurs postdoctoraux	75 \$	100 \$	125 \$
Tarif quotidien (sur place seulement)	-	-	175 \$

Résumés

Pour pouvoir publier votre résumé en ligne et dans le programme du congrès, nous devons le recevoir au plus tard le 15 avril 2008 au moyen du formulaire électronique. Les organisateurs remercient les conférenciers de bien vouloir respecter cette importante date limite. Les résumés paraîtront sur le site internet dans les dix jours suivant la date de présentation.

Nous devons recevoir les résumés pour la session de présentations par affiches au plus tard le 15 avril 2008 pour pouvoir les évaluer.

Si vous remarquez des erreurs d'affichage (polices de caractère) à la navigation, veuillez utiliser la version PDF du résumé, qui correspond fidèlement à la version publiée.

Hébergement

À cause du Grand Prix se tenant immédiatement après le congrès, le logement à prix abordable est limité aux deux choix proposés dans notre contrat de groupe. Nous recommandons très fortement que vous fassiez vos réservations d'hébergement le plus rapidement possible car le prix des hôtels pourra augmenter de presque 300 % pendant le Grand Prix.

Pour y avoir droit, vous devez réserver avant les dates limites indiquées en mentionnant le code de groupe. Les réservations

faites après la date limite ne seront acceptées que s'il reste des chambres, et il se pourrait que le tarif préférentiel ne soit plus en vigueur.

Les tarifs sont par nuit, par personne, et sont indiqués en devises canadiennes. Toute réservation doit être garantie par le paiement d'une nuit ou par une carte de crédit reconnue. Nous vous recommandons de vérifier les modalités de paiement et d'annulation au moment de faire votre réservation, car celles-ci varient d'un établissement à l'autre.

Résidences de l'UQAM de l'Ouest

2100, rue Saint-Urbain, Montréal, QC, H2X 4E1

Tél : 1-514-987-7747, Fax : 1-514-987-0159

Courriel : delouest-residences@uqam.ca

Web : www.residences-uqam.qc.ca

Nom de groupe : Congrès Canada-France

Tarifs à partir de 41 \$ la nuit

Date limite pour la réservation : 16 avril

Four Points by Sheraton

L'hôtel est situé à environ 5 minutes de marche de l'UQAM, au 475, rue Sherbrooke Ouest, Montréal, QC, H3A 2L9

Tél : 1-514-842-3961, Fax : 1-514-842-0945

Web : www.fourpointsmontreal.com

Tarifs à partir de 120 \$ la nuit

Date limite pour la réservation : 30 avril

Pour confirmer une réservation, composez le numéro de téléphone ci-dessus ou écrivez à Benjamin Magazzinich à benjamin@fourpointsmontreal.com. Veuillez indiquer "Canada-France Congress reservation" dans le titre du message, donner les dates de départ et d'arrivée, spécifier une arrivée tardive, le cas échéant, et donner vos préférences pour le type de chambre (fumeur, non fumeur, type de lit). La réservation doit être confirmée par une carte de crédit.

Services de garde

L'hôtel n'offre pas de service de garde sur place; le personnel de la réception ou le concierge pourront vous aider à trouver un gardien ou une gardienne des environs. Nous vous recommandons de faire vos démarches et vos réservations à l'avance.

Déplacements

Le trajet en taxi de l'aéroport au centre-ville coûte autour de 40 \$.

Un service de navette est disponible au coût de 14 \$ pour un aller simple et de 24 \$ pour un aller-retour. Veuillez consulter le www.admtl.com pour plus de détails.

Vous trouverez des renseignements détaillés concernant la ville de Montréal et le Québec (renseignements touristiques, température et climat locaux, cartes de la ville et des attractions touristiques, circuits touristiques piétonniers, etc.) sur les sites web suivants :

Tourisme Montréal (www.tourisme-montreal.org)

Tourisme Québec (www.bonjourquebec.com)

Service météorologique du Canada (www.meteo.gc.ca)

Subventions pour préparation d'affiches

Pour aider les étudiants à préparer des affiches, MITACS a réservé certains fonds (jusqu'à 50 \$ par affiche) pour couvrir

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

une partie des frais de préparation. Veuillez noter que le logo de MITACS doit figurer sur l'affiche et peut être téléchargé du site du congrès.

Les formulaires de demande de remboursement seront envoyés par voie électronique immédiatement après le congrès. Vous devez soumettre à MITACS tous les reçus originaux pertinents. Les demandes doivent être soumises au plus tard quatre semaines après le congrès. Les enveloppes oblitérées après le 6 juillet 2008 ne seront pas acceptées, et aucun remboursement ne sera accordé. Veuillez accorder de quatre à six semaines pour recevoir votre remboursement.

Aide financière aux étudiants

Nous encourageons fortement la participation des étudiants. À cette fin, nous accordons des fonds substantiels pour compenser une partie des frais de préparation d'une affiche, ainsi que les frais de voyage et de logement pour les étudiants des cycles supérieurs et les chercheurs postdoctoraux. Des subventions sont offertes aux étudiants des cycles supérieurs et aux chercheurs postdoctoraux qui étudient ou sont affiliés à une université canadienne, et qui entreprennent une recherche dans laquelle les mathématiques jouent un rôle central. Ces subventions ne seront attribuées qu'aux étudiants qui auront payé leurs frais d'inscription au 1er avril 2008 et qui participeront activement au congrès. Une telle participation peut inclure la présentation d'une affiche ou d'un exposé en session, ou encore la participation au conseil étudiant de MITACS.

Subventions de déplacement	
Étudiants voyageant depuis	Subvention maximale
Terre-Neuve	Jusqu'à 550 \$
Nouveau-Brunswick	Jusqu'à 500 \$
Nouvelle-Écosse, Île-du-Prince-Édouard	Jusqu'à 450 \$
Québec (plus de 100 km de Montréal)	Jusqu'à 150 \$
Ontario (100-200 km de Montréal)	Jusqu'à 150 \$
Ontario (plus de 200 km de Montréal)	Jusqu'à 250 \$
Manitoba	Jusqu'à 550 \$
Saskatchewan	Jusqu'à 650 \$
Alberta	Jusqu'à 700 \$
Colombie-Britannique	Jusqu'à 800 \$

Ces subventions visent à couvrir une partie des frais de déplacement (billet d'avion, location de voiture et kilométrage) et les frais d'hébergement de style dortoir. (Les résidences de l'UQAM offrent des suites qui conviennent au logement partagé. Les étudiants doivent demander à leur directeur de recherche s'ils peuvent avoir droit à des subventions de déplacement additionnelles. Le personnel de MITACS ne fait aucune réservation d'hébergement ou de voyage pour vous. Veuillez faire vos propres arrangements et présenter votre demande de remboursement directement à MITACS, après le congrès.

Pour maximiser les économies d'échelle, MITACS encourage les étudiants appartenant à un même établissement à voyager ensemble lorsqu'ils peuvent se rendre au congrès en voiture. On exige des étudiants qu'ils participent activement à tous les aspects du congrès, et les remboursements seront effectués à la seule discrétion de MITACS.

Les formulaires de demande de remboursement seront envoyés par voie électronique immédiatement après le congrès. Vous devez soumettre à MITACS tous les reçus originaux pertinents. Les demandes doivent être soumises au plus tard quatre semaines après le congrès. Les enveloppes oblitérées après le 6 juillet 2008 pourraient être refusées; aucun remboursement ne serait alors accordé. Veuillez accorder de quatre à six semaines pour recevoir votre remboursement.

Expositions

Le salon des exposants sera ouvert de 9 h 30 à 16 h les 2 et 3 juin au pavillon Sherbrooke de l'UQAM.

Nous vous invitons à visiter les comptoirs d'adhésion de la SCMAI et de la SMC dans l'aire d'inscription.

Séances de travail

Assemblée générale de la SCMAI : 3 juin

Réunion du conseil d'administration de la SCMAI : 1er juin

Assemblée générale annuelle de la SMC : 3 juin

Réunion du conseil d'administration de la SMC : 1er juin

Lunch du Groupe de développement de la SMC : 1er juin

Réunion du comité exécutif de la SMC : 31 mai

Assemblée générale annuelle de MITACS : 4 juin

Réunion du conseil d'administration de MITACS : 3 juin

Réunion du conseil consultatif scientifique international de MITACS : 31 mai

Réunion des responsables de projets de MITACS : 4 juin

Réunion du comité de gestion de la recherche de MITACS : 1er juin

Réunion du comité consultatif étudiant de MITACS : 4 juin

Activités sociales et connexes

Réception de bienvenue : 1er juin

Activité sociale des étudiants : 2 juin

Réception et cérémonie de remise des prix : 4 juin

Directeurs scientifiques du congrès

Octav Cornea, Université de Montréal

Nassif Ghoussoub, UBC

François Loeser, École normale supérieure

Comité scientifique

Jean-Pierre Bourguignon (Institut des Hautes Études Scientifiques)

Ivar Ekeland (UBC / PIMS)

Étienne Ghys (ENS, Lyon)

Arvind Gupta (SFU / MITACS)

Barbara Keyfitz (Fields / Houston)

François Lalonde (CRM / Montréal)

William F. Langford (Guelph)

Claude Le Bris (École nationale des Ponts et Chaussées)

Etienne Pardoux (Université de Provence)

Gilles Pisier (Paris VII)

Christiane Rousseau (Montréal)

Logistique locale

Christiane Rousseau (Montréal)

Alexandra Haedrich (UQAM)

Jo-Anne Rockwood (MITACS, ex-officio)

Gertrud Jeewanjee (CMS, ex-officio)

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

Canada-France Congress 2008 UQAM, Montreal June 1-5 www.canada-france.math.ca

The following organizations:

Canadian Applied and Industrial Mathematics Society (CAIMS)
Canadian Mathematical Society (CMS)
Centre de recherches mathématiques (CRM)
Fields Institute
Institut des sciences mathématiques (ISM)
Mathematics of Information Technology & Complex Systems (MITACS)
Pacific Institute for the Mathematical Sciences (PIMS)
Société de Mathématiques Appliquées & Industrielles (SMAI)
Société Mathématique de France (SMF)
Université du Québec à Montréal (UQAM)

invite the Canadian and French mathematical communities to attend the Second Canada-France Congress 2008. The Congress will include the annual conferences of CAIMS and MITACS as well as the CMS Summer Meeting.

The scientific sessions are scheduled from June 2-5, with the poster session taking place on June 1. Business Meetings will be scheduled starting May 31. We invite you to attend a variety of social events including a Welcome Reception on June 1, the student social on June 2 and the Awards Ceremony on June 4. Please note that la Société Française de Statistique (SFdS) and the Statistical Society of Canada (SSC) are holding a joint conference in Ottawa just prior to this congress thus guests may choose to attend both events.

Plenary Speakers

Yves André (CNRS-ENS, Paris)
Olivier Biquard (Strasbourg)
Luc Devroye (McGill)
Andrew Granville (Montréal)
Alice Guionnet (CNRS-ENS, Lyon)
Rick Kenyon (UBC)
Gérard Laumon (CNRS-Orsay)
Mary Pugh (Toronto)
Eric Sere (Paris-Dauphine)
Jean-Pierre Serre (Collège de France)
Nicole Tomczak-Jaegermann (Alberta)
Nizar Touzi (CREST-Paris)
Jianhong Wu (York)

Prizes

CAIMS Arthur Beaumont Distinguished Service Award:
to be announced
CAIMS Cecil Graham Doctoral Dissertation Award:
to be announced
CAIMS Research Prize:
to be announced
CMS Jeffery-Williams Prize:
Martin Barlow (UBC)
CMS Krieger-Nelson Prize:
Izabella Laba (UBC)
CMS Excellence in Teaching Award:
to be announced
MITACS Poster Competition Prizes:
to be announced

MITACS Student Awards:
to be announced

Public Lecture:
Yvan Saint-Aubin (Montréal)

Registration

Registration fees are given in Canadian dollars. Payment may be made by cheque (Canadian or US dollars), or by VISA or MasterCard. To qualify for the reduced rate, payment must be received by April 1; online registration closes on May 15. Receipts will be provided at the congress.

Registration covers admission to all aspects of the conference, including:

- Listen to leading Canadian and International speakers
- Attend scientific sessions
- Showcase student research by presenting a poster
- Participate in Student workshops
- Develop contacts through networking opportunities
- Attend all social events, including Opening Reception.
- Student registrations fees also include a ticket to the Student Social. We have discounted the registration fee to encourage students to attend.

Advantages to Pre-Registration:

- reduced fees for early registration before April 1
- your name appears on the list of participants on the congress web site
- your registration package is waiting for you at the reception on Sunday evening
- no waiting in line to process your registration!

There will be several additional CAIMS minisymposia. Further details can be found on the website and in the further issues of the CMS Notes.

Contributed Papers

Org: Luc Bélair, François Bergeron (UQAM)
Papers of 20 minutes duration are invited. For an abstract to be eligible, the abstract must be submitted online [www.cms.math.ca/Events/summer08/abs/] before April 15, 2008. The abstract must be accompanied by its contributor's registration form and payment of the appropriate fees. To better assist the organizers, please include the Primary (2000) AMS Classification (<http://www.ams.org/msc/>).

Poster Session

We encourage students and postdoctoral fellows to display posters to present their recent work and results. This gives a chance for media, professors, and students of all levels to gain an appreciation for the type of projects being undertaken in the field of mathematical sciences. Posters are judged during the congress, and prizes are awarded for the top ten posters. For posters to be considered, they have to be submitted online April 15, 2008.

Poster Subsidies

In order to facilitate student and postdoctoral poster

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

preparations, we have set aside funds (up to \$50 per poster) to help with the cost of preparing a poster. The MITACS logo must appear on the poster, it can be downloaded from the congress web site.

Reimbursement Forms will be sent out electronically immediately after the conference. You must submit original receipts. Claims must be submitted within four weeks of the conference. Claims postmarked after July 6, 2008 will not qualify for reimbursement. Please allow four to six weeks to receive your payment.

Refund Policy

Participants wishing to cancel their registration must notify MITACS <jrockwood@mitacs.ca> in writing by May 15 to receive a refund less a \$40 processing fee. Those whose contributed paper has not been accepted will upon request be fully refunded.

Registration Fees (in CAN\$)	Early rate (before April 1)	Regular rate (April 1 - May 15)	Onsite rate (after May 31)
Prize, Plenary and Public Lecturer	\$0	\$0	\$0
Participant with Grant or Private Sector Participant	\$250	\$300	\$350
Participant without Grant	\$100	\$125	\$150
Students, Postdocs	\$75	\$100	\$125
One-day fee (onsite only)	-	-	\$175

Submission of Abstracts

For abstracts of talks to be published on-line and in the program of the Congress, they have to be submitted by April 15, 2008, using the on-line form. The organizers appreciate the cooperation of all speakers in observing this important deadline. Abstracts will appear on the website within 10 working days of the date of submission.

Abstracts for research posters have to be submitted by April 15, 2008 in order to be considered.

If you encounter inconsistent display of fonts in your browser, please consult the provided PDF version of the abstract, which corresponds to the published version.

Accommodation

Due to the Grand Prix taking place immediately after the Congress, affordable accommodation is limited to the following two venues covered by our group contract. We strongly recommend completing your hotel reservations as early as possible, as hotel rates will increase by up to 300% during the Grand Prix.

To be eligible for the reduced room rates, participants must make their reservations before the date indicated, quoting the group code. After the deadline, the group rate will no longer apply.

Rates are per room per night and are quoted in Canadian dollars. Reservations must be guaranteed by a one-night deposit or a major credit card. It is recommended to clarify payment and cancellation policies when making the reservation, as these vary from hotel to hotel.

Résidences de l'UQAM de l'Ouest

2100 rue Saint-Urbain, Montréal, QC, H2X 4E1

Tel: 1-514-987-7747, Fax: 1-514-987-0159

Email: delouest-residences@uqam.ca

Web: www.residences-uqam.qc.ca

Group name: Canada-France Congress

Rates start at \$41.00 per night

Reservation deadline: April 16

Four Points by Sheraton

The hotel is located approximately five minutes walk from UQAM at 475 Sherbrooke Street West, Montreal, QC, H3A 2L9

Tel: 1-514-842-3961, Fax: 1-514-842-0945

Web: www.fourpointsmontreal.com

Rates start at \$120.00 per night

Reservation deadline: April 30

Reservations can be confirmed by calling the above phone number or emailing Benjamin Magazzinich at benjamin@fourpointsmontreal.com. Please indicate "Canada-France Congress reservation" in the subject line, and provide the arrival and departure dates, possible late arrival and room preference (smoking, non-smoking, bed type). Credit card information must be supplied to confirm your reservation.

Child Care

The hotel does not offer in-house child care; the Front desk or the Concierge will assist in finding child care providers nearby. Advance research and arrangements are recommended.

Travel

A taxi fare from the airport to downtown costs approximately \$40.

A shuttle services is available at the cost of \$14 for a one-way ticket and \$24 for a return ticket. Please consult www.adm1l.com for details.

Detailed information regarding the city of Montreal and the Province of Quebec, including tourism information, local weather and climate, site and street maps, and itineraries for self-guided tours, are available at the following websites:
Tourism Montreal (www.tourism-montreal.org)
Tourism Quebec (www.bonjourquebec.com)
Canada Weather Forecast (www.weatheroffice.ec.gc.ca)

Student Travel Support

We strongly encourage the participation of students. Towards this, we are allocating significant funds to help defray the cost of poster preparation, travel and accommodation for graduate students and post-doctoral fellows.

Subsidies are available for graduate students or postdoctoral fellows who are studying at a Canadian University and who are undertaking research in which mathematics plays a central role. Student subsidies will only be granted to those students who have paid their registration fees by April 1, 2008, and who actively participate in the conference. Such participation could include presenting a poster, giving a talk in a session or joining the MITACS student council.

Travel Subsidies

Students traveling from	Maximum subsidy
Newfoundland	up to \$550
New Brunswick	up to \$500
Nova Scotia, Prince Edward Island	up to \$450
Quebec (more than 100 km from Montreal)	up to \$150
Ontario (100 – 200 km from Montreal)	up to \$150
Ontario (more than 200 km from Montreal)	up to \$250
Manitoba	up to \$550
Saskatchewan	up to \$650
Alberta	up to \$700
British Columbia	up to \$800

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

These funds are intended to subsidize travel costs (air fare, car rental, mileage) and dorm-style (shared) accommodations. The residences at UQAM offer suites that are suitable for shared accommodations. Students should discuss additional travel subsidies with their supervisor. The conference organizers will not book accommodation or travel for you. Please make your own arrangements, and apply for reimbursement after the conference.

To maximize cost efficiencies, we encourage students from the same school to travel together where they are in driving range of the conference. Students are expected to participate fully in all aspects of conference, and reimbursements are at the sole discretion of the conference organizers.

Reimbursement Forms will be sent out electronically immediately after the conference. You must submit original receipts, including boarding passes for submission. Claims must be submitted within four weeks of the conference. Claims postmarked after July 6, 2008 may not qualify for reimbursement. Please allow four to six weeks to receive your payment.

Exhibits

Exhibits will be open from 9:30 am to 4:00 pm on June 2-3 in the Sherbrooke Pavillon of UQAM.

We invite participants to visit the CAIMS and CMS Membership booths, located in the registration area.

Business Meetings

CAIMS Annual General Meeting: June 3

CAIMS Board of Directors Meeting : June 1

CMS Annual General Meeting: June 3

CMS Board of Directors Meeting: June 1

CMS Development Group Luncheon: June 1

CMS Executive Committee Meeting: May 31

MITACS Annual General Meeting June 4

MITACS Board of Directors Meeting: June 3

MITACS International Scientific Advisory Board (ISAB) Meeting: May 31
MITACS Project Leaders Meeting: June 4
MITACS Research Management Committee (RMC) Meeting: June 1
MITACS Student Advisory Committee (SAC) Meeting: June 4

Social and Related Events

Welcoming Reception: June 1

Student Social: June 2

Award Ceremony and Reception: June 4

Congress Scientific Directors

Octav Cornea, Université de Montréal

Nassif Ghoussoub, UBC

François Loeser, École normale supérieure

Scientific Committee

Jean-Pierre Bourguignon (Institut des Hautes Études Scientifiques)

Ivar Ekeland (UBC / PIMS)

Étienne Ghys (ENS, Lyon)

Arvind Gupta (SFU / MITACS)

Barbara Keyfitz (Fields / Houston)

François Lalonde (CRM / Montréal)

William F. Langford (Guelph)

Claude Le Bris (École nationale des Ponts et Chaussées)

Etienne Pardoux (Université de Provence)

Gilles Pisier (Paris VII)

Christiane Rousseau (Montréal)

Local Organization

Christiane Rousseau (Montréal)

Alexandra Haedrich (UQAM)

Jo-Anne Rockwood (MITACS, ex-officio)

Gertrud Jeewanjee (CMS, ex-officio)

Call for nominations CJM/CMB - Associate Editors Appel de mises en candidature JCM/BCM - Rédacteurs associés

The Publications Committee of the CMS solicits nominations for Associate Editors for the Canadian Journal of Mathematics (CJM) and the Canadian Mathematical Bulletin (CMB). The appointment will be for five years beginning January 1, 2009. The continuing members (with their end of term) are below.

The deadline for the submission of nominations is **April 15, 2008**.

Nominations, containing a curriculum vitae and the candidate's agreement to serve should be sent to the address below.

Address for Nominations / Addresse de mise en candidatures:
Juris Steprans, Chair / Président
CMS Publications Committee / Comité des publications de la SMC
Department of Mathematics, York University
N520 Ross, 4700 Keele Street
Toronto, Ontario M3J 1P3
chair-pubc@cms.math.ca

CURRENT MEMBERS / MEMBRES ACTUELS

CJM Editors-in-Chief / Rédacteurs-en-chef du CJM

H. Kim (Toronto) 12/2011; R. McCann (Toronto) 12/2011.

CMB Editors-in-Chief / Rédacteurs-en-chef du BCM

N. Bergeron (York) 12/2010; Jianhong Wu (York) 12/2010.

Associate Editors / Rédacteurs associés

K. Bezdek (Calgary) 12/2011; S. Boyer (UQAM) 12/2008; J.

Le comité des publications de la SMC sollicite des mises en candidatures pour des rédacteurs associés du Journal canadien de mathématiques (JCM) et Bulletin canadien de mathématiques (BCM). Le mandat sera de cinq ans et débutera le 1 janvier 2009. La liste des éditeurs qui sont en cours de mandat se trouve ci-dessous.. L'échéance pour proposer des candidats est le **15 avril 2008**.

Les mises en candidature, accompagnées d'un curriculum vitae ainsi que du consentement du candidat(e), devrait être envoyées à l'adresse ci-dessous.

Colliander 12/2011; L. Devroye (McGill) 12/2009; A. Dow (North Carolina) 12/2010; G. Elliott (Toronto) 12/2010; P. Guan (McGill) 12/2008; K. Hare (Waterloo) 12/2011; S. Kudla (Toronto) 12/2008; T. Ransford (Laval) 12/2009; R. Vakil (Stanford) 12/2009.

CONGRÈS CANADA-FRANCE 2008 / CANADA-FRANCE CONGRESS 2008

Sessions

Combinatoire algébrique

Algebraic Combinatorics

Org: Christophe Hohlweg (Fields Institute) and Franco Saliola (UQAM)

Groupes algébriques et sujets reliés

Algebraic Groups and Related Topics

Org: Phillippe Gille (Paris-Sud), Zinovy Reichstein (UBC)

Topologie algébrique

Algebraic Topology

Org: Alejandro Adem (UBC), Bob Oliver (Paris XIII)

Théorie analytique des nombres

Analytic Number Theory

Org: Philippe Michel (Montpellier), Ram Murty (Queen's)

Géométrie arithmétique et théorie des nombres

Arithmetic Geometry and Number Theory

Org: Gaëtan Chenevier (CNRS-ENS, Paris), Henri Darmon (McGill)

Formes automorphes

Automorphic Forms

Org: Stephen Kudla (Toronto), Colette Moeglin (CNRS-IMJ)

Analyse complexe et théorie des opérateurs

Complex Analysis and Operator Theory

Org: Emmanuel Fricain (Lyon), Javad Mashreghi (Laval) and Thomas Ransford (Laval)

Systèmes dynamiques complexes

Complex Dynamical Systems

Org: Xavier Buff (Toulouse), Misha Lyubich (Toronto), Tan Lei (Cergy-Pontoise)

Mathématiques financières

Financial Mathematics

Org: Nizar Touzi (CREST-Paris), Thomas Salisbury (York)

Analyse géométrique et nonlinéaire

Geometric and Nonlinear Analysis

Org: Pengfei Guan (McGill), Emmanuel Hebey (Cergy)

Mécanique des fluides industrielle

Industrial Fluid Mechanics

Org: Neil Balmforth (UBC), Jean Frédéric Gerbeau (INRIA), Bertrand Maury (Paris Orsay)

Méthodes cinétiques en EDP

Kinetic Methods in Partial Differential Equations

Org: François Castella (Rennes), Reinhard Illner (Victoria)

Éducation Mathématique

Mathematics Education

Org: Michèle Artigue (Paris), Bernard Hodgson (Laval)

Théorie des modèles et applications à la géométrie

Model Theory and Applications to Geometry

Org: Zoé Chatzidakis (CNRS), Patrick Speissegger (McMaster)

Géométrie non commutative et K-théorie pour algèbres d'opérateurs

Non-Commutative Geometry and K-Theory for Operator Algebras

Org: Alain Connes (Collège de France-IHES), George Elliott (Toronto)

Dynamique nonlinéaire dans les sciences de la vie

Nonlinear Dynamics in Life Sciences

Org: Jacques Bélair (Montréal), Pascal Chossat (CIRM-Marseille), Fahima Nekka (Montréal), Jianhong Wu (York)

Analyse numérique des systèmes hyperboliques

Numerical Analysis for Hyperbolic Systems

Org: Marc Laforest (École Polytechnique de Montréal) and Emmanuel Lorin (Paris-Sud XI)

Équations aux dérivées partielles

Partial Differential Equations

Org: Henri Berestycki (Paris), Robert Jerrard (Toronto)

Probabilités

Probability

Org: Martin Barlow (UBC), J.F. Le Gall (Paris XI-ENS), Edwin Perkins (UBC), Wendelin Werner (Paris Orsay)

Calcul scientifique

Scientific Computing

Org: Christine Bernardi (CNRS-Paris VI), Anne Bourlioux (Montréal), Bryan Wetton (UBC)

Théorie des ensembles et ses applications

Set Theory and its Applications

Org: Alain Louveau (Paris VI) and Stevo Todorcevic (Toronto; Paris Dauphine)

Statistique

Statistics

Org: Yannick Baraud (Nice), Boris Levit (Queen's)

Processus stochastiques en évolution, écologie et génétique

Stochastic Processes in Evolution, Ecology and Genetics

Org: Donald Dawson (Carleton), Sylvie Méléard (Ecole Polytechnique-Paris X)

Topologie symplectique et de contact

Symplectic and Contact Topology

Org: Emmanuel Giroux (CNRS-ENS Lyon), Yael Karshon (Toronto)

Topologie, noeuds et sujets reliés

Topology, Knots and Related Fields

Org: Michel Boileau (Toulouse), Stephen Boyer (UQAM)

Méthodes variationnelles et numériques en géométrie, physique et chimie

Variational and Numerical Methods in Geometry, Physics and Chemistry

Org: Lia Bronsard (McMaster), Eric Cances (ENPC), Maria Esteban (CNRS - Paris-Dauphine)

Femmes en mathématiques

Women in Mathematics

Org: Barbara Keyfitz (Fields), Marie-Françoise Roy (Rennes)

Communications Libres

Contributed Papers

Org: Luc Bélair, François Bergeron (UQAM)

Session d'affiches

Poster Session

SCHEDULE / HORAIRE (AS OF JAN 15, 2007)

	Saturday / Samedi May 31 mai	Sunday / Dimanche June 1 / 1 ^{er} juin	Monday / Lundi June 2 juin	Tuesday / Mardi June 3 juin	Wednesday / Mercredi June 4 juin	Thursday / Jeudi June 5 juin
All day Continu			8:00-17:00 Registration / Inscription 9:30-16:00 Exhibits / Expositions Poster Presentation / Présentations par affiches	8:00-17:00 Registration / Inscription 9:30-16:00 Exhibits / Expositions Poster Presentation / Présentations par affiches	8:00-16:00 Registration / Inscription	8:00-16:00 Registration / Inscription
Business Mg Réunions	9:00-17:00 MITACS ISAB Meeting 18:00-22:00 CMS Executive Committee Dinner	8:30-12:30 MITACS RMC Meeting 11:00 AM-13:00 CMS Dev. Group Lunch 13:30-18:30 CAIMS Board of Directors CMS Board of Directors		12:00-17:00 MITACS Board Meeting 12:30-14:00 CAIMS AGM CMS AGM	8:00-10:30 MITACS PL Meeting 9:00-12:00 MITACS SAC Meeting 12:00-13:30 MITACS AGM	
Work shop			12:30-14:30 Mathematics & Industry Workshop	12:30-14:00 Student Workshop	Finance Workshop	Finance Workshop
Scientific and Social Events / Activités scientifiques et sociales	9:00-12:00 Poster setup	8:00-8:30 OPENING / OUVERTURE	8:30-9:30 Plenary lecture conférence plénière	8:00-9:30 Sessions	8:00-9:30 Sessions	8:00-9:30 Sessions
		9:30 – 10:00 Break/Pause				
		10:00-11:30 Sessions	10:00-11:30 Sessions	10:00-11:30 Sessions	10:00-11:30 Sessions	
		11:30-12:30 Prize Lecture conférence de lauréat	11:30-12:30 Prize Lecture conférence de lauréat	11:30-12:30 Prize Lecture conférence de lauréat	11:30-12:30 Prize Lecture conférence de lauréat	11:30-12:30 Prize Lecture conférence de lauréat
	12:00-15:00 Poster Judging	12:30-14:30 Break / Pause	14:00-15:00 Plenary lecture conférence plénière	14:00-15:00 Plenary lecture conférence plénière	14:00-15:00 Plenary lecture conférence plénière	14:00-15:00 Plenary lecture conférence plénière
		14:30-16:00 Sessions	15:00 -16:00 Plenary lecture conférence plénière	15:00 -16:00 Plenary lecture conférence plénière	15:00 -16:00 Plenary lecture conférence plénière	15:00 -16:00 Plenary lecture conférence plénière
	15:00-15:30 Coffee break			16:00-16:15 Break/Pause		
	15:30-17:00 Poster Judging	16:15 – 17:15 Plenary lecture conférence plénière	16:15 – 17:15 Plenary lecture conférence plénière	16:15 – 17:15 Plenary lecture conférence plénière	16:15 – 17:15 Plenary lecture conférence plénière	16:15 – 17:15 Plenary lecture conférence plénière
	18:00-19:00 Registration / Inscription	17:15 – 18:15 Plenary lecture conférence plénière	17:15 – 18:15 Plenary lecture conférence plénière	17:15-19:30 Award Ceremony and Reception Réception et cérémonie de remise des prix	17:15-19:30 Award Ceremony and Reception Réception et cérémonie de remise des prix	17:15-17:45 CLOSING / MOT DE LA FIN
	19:00-19:30 Prix CMS Teaching Award				19:30-20:30 Public / Populaire	
	19:30-21:00 Welcome Reception Réception de bienvenue	19:30-22:00 Student Social – Activité sociale pour les étudiants				

UPCOMING EVENT

Groups of Homotopy Equivalences and Related Topics

June 29 - July 5, 2008
Dalhousie University

This will be the third international meeting on this topic. The first was held at the CRM, Montreal (1988) and the second at the Palazzo Feltrinelli of the Universita di Milano at lake Garda (1999). Proceedings of these were published in Springer Lecture Notes in Mathematics v. 1425 (1990) and Contemporary Mathematics (AMS) v. 274 (2001).

For information please visit the website:
<http://www.mathstat.dal.ca/~keast/homotopy.html>

Organizing Committee:

Martin Arkowitz (Dartmouth College)
Keith Johnson (Dalhousie University)
Ken-Ichi Maruyama (Chiba University)
Renzo Piccinini (Dalhousie University)

EMPLOYMENT OPPORTUNITY

SHARCNET RESEARCH CHAIR (AD #27)

The Department of Mathematics and Computer Science at Laurentian University invites applications for a probationary tenure-track faculty position as a SHARCNET Chair in Mathematical and Computational Materials Science to commence on July 1, 2008, subject to final budgetary approval.

The Chair will facilitate the development of new computation-based materials science research projects in collaboration with other members in the Faculty of Science and Engineering, especially in areas of relevance to mining, mineral sciences and products derived from mineral processing. These may include (but are not limited to) the mathematical modeling of material structures, interfaces, interfacial processes, and the mechanical properties of materials.

The proposed Chair is expected to possess experience in mathematical modeling, in the development of visualization techniques, and have expertise in computational aspects of materials science and/or engineering. The Chair will be expected to participate in the development of the proposed MSc in Computational Sciences and PhD in Materials Science programs, thus strengthening the collaboration potential between the Department of Mathematics and Computer Science and other departments of the Faculty of Science and Engineering. The Chair will likely be cross-appointed with at least one other department in the Faculty (Chemistry and Biochemistry, Physics, Engineering and Earth Sciences), depending on the background and academic interests of the individual. The successful candidate will show leadership and innovation in research and teaching.

Applicants are expected to have a Ph.D. or equivalent, demonstrated excellence in research and excellent teaching skills. Postdoctoral experience is an asset. The successful applicant will be expected to initiate and lead an independent research program, and participate in interdisciplinary research with material science group. The successful candidate will demonstrate excellence or promise of excellence in teaching and graduate supervision, and will be expected to develop a vigorous, externally-funded research program. Information about the faculty of science and engineering and areas of research can be found at the website:
<http://scienceandengineering.laurentian.ca/>

The position of the SHARCNET Chair is funded for two years by SHARCNET, which has developed a network of high-performance computer clusters spanning 16 academic institutions in Ontario. Please see www.sharcnet.ca for more information.

In accordance with the University's policy on Bilingualism, Laurentian has a requirement of passive bilingualism (French/English) as a condition of tenure.

Laurentian University (LU) is located in Sudbury, an attractive modern city offering unique cultural, recreational, and educational opportunities. For further information see
<http://www.sudburytourism.ca>

Candidates should forward a cover letter specifying the ad#, recent curriculum vitae, including a list of publications and a statement of research interests and teaching philosophy and also arrange for three letters of reference to be sent directly to the address below or emailed to asr@laurentian.ca. Review of completed applications will begin **January 15, 2008**. The position remains open until filled.

Harley d'Entremont
Laurentian University
Sudbury, Ontario
Canada P3E 2C6

Laurentian is committed to equity in employment and encourage applications from all qualified applicants, including women, aboriginal peoples, members of visible minorities and persons with disabilities. All qualified candidates are encouraged to apply, however Canadian citizens and permanent residents will be given priority.

LU faculty is part of the LUFA (Laurentian University Faculty Association), information and the Collective Agreement can be found at www.lufapul.ca

— as they do in any art — even if tightly intertwined. Mulling over (evaluating) a theorem may motivate hopes for an improvement, which could generate the effort to get there. Sinclair has interviewed a number of eloquent mathematicians, and I frequently nodded in agreement with their remarks, but found no ready ways to expand or refine them.

The late Martin Schiralli, philosopher by trade, uses the first 40% of his essay to take a run (past such disparate icons as Gregory Bateson and Immanuel Kant) at his main thesis, which argues that the Pythagorean notion of “number” was about order, not quantity. He sticks his neck out far enough to say “pattern”, and thus can agree with Philolaus (the only Pythagorean of whom we have written traces), saying: “For it is not possible that anything whatsoever be understood or known without this”. Objections anyone?

William Higginson’s Chapter 6, contentious by his own admission, is summed up by the title of its last paragraph: “*Homo Mathematico-Aestheticus?*” (note the question mark). As you recover from your laughter, *amici literati*, please reflect on what novelties were brought into the world by that evolutionary late-comer, the human brain, and hear your eminent colleague George Steiner proclaim: “It is in mathematics and the sciences that the concepts of creation and of invention, of intuition and of discovery, exhibit their most immediate, visible force.” From the outset of the chapter, such observations are kept tied in with David Hume’s central questions of how the mind works, why it works that way, and what constitutes its humanity.

Section C begins with a spirited defense by Nicholas Jackiw, the father of *The Geometer’s Sketchpad*, of “dynamic geometry”—neither his own software nor anyone else’s, but the very idea of geometry in motion (called “astronomy” in the quadrivium)—ending with the statement: “... the computer mouse in our hand and the dynamic geometry cursor on our screen are the prostheses of our will and imagination. They form the concentrated and distilled simulation of our self that we push before us, beyond our shadow world and into geometry’s clear platonic light.” (Italics mine)

Next, David Pimm addresses a bipolarity crucial to mathematics: that between word and image. Since these poles occur in most of the arts (usually one more than the other), he thereby opens a cornucopia of quotes from Lebesgue, Kandinsky, Krull, Chevalley (*pere & fille*), Shakespeare, Cezanne, and Wittgenstein in just the first two of its thirty pages. To clinch his arguments (about a perceived drift toward the verbal) he could have easily filled twice as many, and a proper review (i.e., critique) would have required double that number again — and therefore must be left as an exercise, with this caveat: if it makes immediate sense, read it again more slowly.

In Chapter 9, the late Dikran Tahta continues in the same vein — only more so — and the same caveat applies. In its search for a link between image and meaning, this essay draws a long arc from Byzantine iconoclasm to Duchamp’s dadaism, in the middle of which you’ll find a statement like: “What is at issue is whether we can let our experiences become iconic...” Stephen Hawking is on record as saying that “Mr. Tahta” was the teacher who had most inspired him — very likely by his famous knack of motivating active mathematics. In these pages, the only vestige of that is the second diagram of page 217. The rest is more a kind of proto-mathematical contemplation — intimate, erudite, and certainly a stimulating read.

Finally arrived at Chapter Omega, I expected to find a summing up of the book’s various theses and speculations — but no, I was served up a few more that had apparently been left out. After turning the first page, I was relieved to hear Alain Connes’s voice describing his experience in a clear, down-to-earth way, without mysteries or speculations. But soon we got back to standing outside the gold-fish bowl, looking in and wondering what, if anything, those critters knew of beauty. We had to slog through Detachment, Melancholy, and Autism, before bumping into an “infamous” quote by Frege, which might find an ever so faint resonance in certain members of the CMS-SMC, as it ends: “I found myself forced to enter a little into psychology, if only to repel the invasion of mathematics.”

CMS Prize Lecturships and Awards Programmes - Prix et bourses de la SMC

The most up-to-date information concerning all CMS Prize Lecturships & Awards programmes, including complete lists of recipients, can be found at: www.cms.math.ca/Prizes/

Vous trouverez l’information la plus récente sur les prix et bourses de la SMC, y compris les listes de lauréats, sur le site web suivant : www.smc.math.ca/Prizes/

La Réunion d'hiver de la SMC, tenue à London (Ontario), en décembre, demeurera dans les annales grâce à la qualité exceptionnelle de son programme scientifique. Tous les participants (plus de 400 inscriptions) à qui j'ai parlé ont encensé la qualité des conférences plénierées et des sessions. J'aimerais remercier **Rick Jardine** (directeur de la Réunion) et **David Riley** (président du comité de logistique local) de leur travail de titan, qui a fait de la Réunion une telle réussite. Je remercie également notre hôte, l'Université Western Ontario, les commanditaires de la Réunion – le CRM, l'Institut Fields, le PIMS et le Réseau MITACS – de même que les nombreux organisateurs de sessions et conférenciers. **Marcelo Borba, Erich Kaltofen, Mikhail Kapranov, Giovanni Landi, Blaine Lawson, Seth Lloyd et Otmar Venjakob** y ont prononcé les conférences plénierées.

La tenue du banquet de la Réunion d'hiver à London était l'occasion rêvée de montrer notre gratitude envers **David et Bessie Borwein** pour leur imposante contribution à la SMC au fil des ans. Si David a déjà été président de la Société, nous avons plutôt choisi de souligner, à London, les efforts de la famille Borwein liés à la création du prix *David-Borwein de mathématicien émérite pour l'ensemble d'une carrière*, dont le premier prix a été remis l'an dernier à Richard Kane. Le lauréat de cette année sera annoncé sous peu. Pour accompagner le prix, la Société remet une sculpture de bronze poli réalisée par l'artiste mathématicien Helaman Ferguson, qui réalise une surface mathématique reliée en même temps à la molécule NaCl (Chlorure de Sodium) et la théorie de la sommabilité. Au banquet, le procureur général de l'Ontario, Chris Bentley, a remis une copie de la sculpture de l'artiste à David et Bessie Borwein.

À la Réunion de London, la SMC a annoncé son intention de nommer **Joseph Khoury** (Université d'Ottawa) comme prochain directeur administratif de la Société. Joseph, qui préside en ce moment le Comité d'éducation de la SMC, remplacera son collègue Graham Wright, qui quittera ce poste à la fin de 2008 après 30 années de services exceptionnels. Ce sera avec plaisir que je travaillerai avec Graham et Joseph pour assurer une transition en douceur et le respect des critères de dévouement et de professionnalisme établis par Graham à ce poste de direction.

Les **finances** de la Société étaient au centre de nombreuses discussions à London. La Société affiche en effet un déficit substantiel pour 2007, attribuable en grande partie à la valeur du dollar canadien par rapport au dollar américain. Nos revues, dont le prix pour les abonnés hors du Canada est établi en dollars américains, sont une source de revenu considérable pour la Société, et la force de la devise canadienne a considérablement réduit nos profits à ce chapitre au cours des dernières années. La Société a pris des mesures pour stabiliser les recettes tirées de ses publications, mais elle se penche sérieusement sur la possibilité de réduire ses dépenses en recherche et en éducation. Comme vous le savez si vous lisez ce bulletin, nos Réunions nécessitent un apport financier substantiel de la Société, notamment en raison du personnel nécessaire à l'organisation de rencontres si complexes et d'une telle ampleur. La **structure de nos Réunions** a fait l'objet de discussions, tant au conseil d'administration qu'à d'autres

occasions, et il en est ressorti un appui massif quant à la valeur de nos Réunions et à la nécessité de réunir la communauté deux fois l'an comme nous l'avons toujours fait. Mais il est aussi clairement ressorti qu'il fallait revoir l'organisation de ces rencontres, en particulier le soutien aux sessions (celui de la Société dépasse le soutien qu'offrent d'autres organismes) et les droits d'inscription (ceux de la SMC étant bas comparativement à ceux d'autres associations de taille semblable). Attendez-vous donc à voir des propositions émerger de ces discussions. J'invite également toute personne que le sujet intéresse à faire valoir son point de vue ou ses idées à un membre de l'exécutif de la SMC.

C'est avec plaisir que j'annonce la contribution substantielle de la **Fondation Harold Crabtree** aux camps mathématiques de la SMC qui se tiendront en Ontario en 2008. Les camps mathématiques comptent parmi les principaux projets d'éducation de la Société et offrent aux élèves du secondaire de tout le pays une occasion inouïe de perfectionner leurs connaissances mathématiques. Nous sommes enchantés de pouvoir compter sur l'appui de la Fondation Harold Crabtree et celui d'autres commanditaires, sans qui ce programme ne pourrait exister. J'aimerais également remercier notre trésorier, David Rodgers, qui a travaillé à la création d'un organisme de charité basé aux États-Unis, appelé **Friends of the Canadian Mathematical Society (CMS)**, qui, nous espérons, sera bientôt en mesure d'émettre des reçus fiscaux à nos donateurs américains.

En juin 2008, l'Université du Québec à Montréal sera l'hôte du grand **Congrès mathématique Canada-France**, effort commun de dix sociétés et instituts canadiens et français, qui prendra la place des rencontres estivales de la SMC, de la SCMAI et du Réseau MITACS. Plus de 600 participants sont attendus à ce congrès, dont le programme promet une variété aussi riche qu'exceptionnelle de conférences plénierées et de sessions spéciales. Comme ce deuxième congrès Canada-France se déroulera juste avant le Grand Prix de Montréal (Formule 1), je vous encourage à vous inscrire et à réserver votre hôtel le plus tôt possible. En décembre, l'Université Carleton sera l'hôte de la **Réunion d'hiver 2008** de la Société.

Un projet du Comité des services électroniques vient d'arriver à terme : **Google Scholar** contient désormais l'intégrale des archives électroniques du *Journal canadien de mathématiques* et du *Bulletin canadien de mathématiques*. Je vous invite à faire vos recherches dans ces publications sur le site de Google Scholar (www.Scholar.Google.com) pour consulter les résultats à l'écran. La SMC possède également des copies numérisées haute résolution de ces documents, pour votre utilisation personnelle. J'aimerais remercier David Rodgers et Michael Doob de leur travail dans ce projet.

Permettez-moi enfin de remercier les membres et les présidents de comités dont le mandat a pris fin en décembre. La Société ne saurait fonctionner sans le dévouement de plus de 140 bénévoles qui occupent l'ensemble de ces postes. Merci à tous de votre apport à la communauté mathématique. Je vous souhaite à tous, chers membres, une année 2008 prospère et productive.

CALENDAR OF EVENTS / CALENDRIER DES ÉVÉNEMENTS

FEBRUARY

2008

FÉVRIER

- 4-14** Advanced Course on Simplicial Methods in Higher Categories (Centre de Recerca Matematica, Bellaterra, Italy)
www.crm.cat/ACQuasiCategories
-
- 18 - 24** Workshop on Harmonic Analysis, (Fields Institute, Toronto, ON)
www.fields.utoronto.ca/programs/scientific/07-08/harmonic_analysis/

MARCH

2008

MARS

- 5-7** The ICMI Centennial Symposium (Accademia dei Lincei, Rome, Italy)
www.unige.ch/math/EnsMath/Rome2008/
-
- 8** The ICMI Centennial Symposium (Istituto dell'Encyclopédia Italiana, Rome, Italy)
www.unige.ch/math/EnsMath/Rome2008/
-
- 4-14** Advanced Course on Geometric Flows and Hyperbolic Geometry (Centre de Recerca Matematica, Bellaterra, Italy)
www.crm.cat/ACGeometryFlows

APRIL

2008

AVRIL

- 5-13** Clay-Fields Conference on Additive Combinatorics, Number Theory, and Harmonic Analysis
www.fields.utoronto.ca/programs/scientific/07-08/harmonic_analysis/
-
- 7-11** Workshop: Spectrum and Dynamics (CRM, Montreal, QC)
activities@crm.umontreal.ca
-
- 12-13** MIT Women in Math (MIT, Cambridge, MA)
www.math.mit.edu/womeninmathv
-
- 16-27** Workshop in Geometric Evolution Equations (CRM, Montreal, QC)
www.crm.umontreal.ca/Equations08

MAY

2008

MAI

- 10-13** SIAM Conference on Optimization (Boston, MA)
www.siam.org/meetings/op08/
-
- 12-16** Workshop: Singularities, Hamiltonian and Gradient Flows (CRM, Montreal, QC)
activities@crm.umontreal.ca
-
- 16-19** 2nd International Conference, Athens Institute for Education and Research (ATINER), (Athens, Greece)
www.atiner.gr/docs/Mathematics.htm
-
- 19-21** Conference on Frontiers in Applied and Computational Mathematics (FACM '08) New Jersey Institute of Technology (Newark, NJ)
<http://m.njit.edu/Events/FACM08/>

- 19-24** Lie Theory and Geometry: The Mathematical Legacy of Bertram Kostant (Pacific Institute of Math Sciences, Vancouver, BC)
www.pims.math.ca/~dxu/08kostant

-
- 25-28** Seventh Iberoamerican Conference on Topology and its Applications (CITA 2008), (Valencia, Spain)
<http://cita.webs.upv.es>

JUNE

2008

JUIN

- 1-3** Canadian Society for History and Philosophy of Mathematics/Société canadienne d'histoire et de philosophie des mathématiques. The 2008 Annual Meeting will be held in conjunction with the Learned (CFHSS) (UBC, Vancouver, B.C.). The special session of the meeting will be on "Trigonometry and its applications."
www.cshpm.org

-
- 1-5** Second Canada-France Congress (UQAM, Montréal, QC)
www.canada-france.math.ca

-
- 4-7** First Joint International Meeting of AMS with the Sociedade Brasileira de Matemática (Rio de Janeiro, Brazil)
www.ams.math.org/amsmtgs/internmtgs.html

-
- 9-20** PIMS Industrial Problem Solving Workshop (University of Regina, SK)
www.pims.math.ca/ipsw

-
- 22-29** 46th International Symposium on Functional Equations (Opava-Hradec nad Moravicí, Czech Republic)
isfe46@math.slu.cz, romanger@us.edu.pl

JULY

2008

JUILLET

- 6-13** Eleventh International Congress on Mathematics Education (ICME-11) (Monterrey, Mexico)
<http://icme11.org/node/12>

-
- 22-26** International workshop on Operator Theory and its Applications (College of William and Mary, Williamsburg, VA)
www.math.wm.edu/~vladi/IWOTA/IWOTA2008.htm

OCTOBER

2008

OCTOBRE

-
- 4-5** AMS Western Section Meeting (UBC & PIMS, Vancouver, BC)
www.ams.math.org/amsmtgs/sectional.html

DECEMBER

2008

DECEMBRE

-
- 17-21** First Joint International Meeting of AMS with the Shanghai Mathematical Society (Shanghai, China)
www.ams.math.org/amsmtgs/internmtgs.html

these discussions, and I would encourage anyone interested in these questions to share their views with a member of the CMS Executive.

In 2008, I am pleased to note that the **Harold Crabtree Foundation** will be providing major support for the CMS Math Camps program in Ontario. We are delighted to have the support of the Harold Crabtree Foundation, NSERC PromoScience and other sponsors. The Math Camps are one of the principal outreach projects of the Society, offering a unique enrichment opportunity for high school students across the country. We are delighted to have the support of the Harold Crabtree Foundation and other sponsors in making this program possible. I would also like to thank our Treasurer David Rodgers, for his work in establishing the **Friends of the Canadian Mathematical Society (CMS)**, a U.S.-based charitable organization, that we hope will be in a position shortly to offer tax receipts to our U.S.-based donors.

In June of 2008, the Université du Québec à Montréal will play host to the large **Canada-France mathematics congress**, a joint effort of ten Canadian and French societies and institutes, which will subsume the Summer Meeting of the CMS and the annual Meetings of CAIMS, and MITACS. The meeting is

expected to attract well over 600 participants, and will include an extensive and stellar array of plenary talks and special sessions. The Second Canada-France Congress occurs just before the Montreal Grand Prix auto race, so I encourage you to register and book your hotels soon! Later in the year, we look forward to the **2008 CMS Winter Meeting**, to be held in December, and organized by Carleton University.

A project of the Electronic Services Committee has come to fruition, with the appearance on **Google Scholar** of the entire electronic back-file of the Canadian Journal of Mathematics and the Canadian Mathematical Bulletin. I invite you to search either of these publications on the Google Scholar site (www.Scholar.Google.com), to see the results at screen resolution. The CMS also has high-quality scans of the back-file for our own use. I'd like to thank David Rodgers and Michael Doob for their efforts in moving this project forward.

I would also like to thank the committee members and committee chairs whose terms of office ended in December. The society only functions because of the dedicated work of over 140 volunteers who at any time fill such positions. Thank you all for your service to the mathematical community. And to all members, I wish you a prosperous and productive 2008.

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October / octobre	August 15 / le 15 août		
November / novembre	September 15 / le 15 septembre		
December / décembre	October 15 / le 15 octobre		
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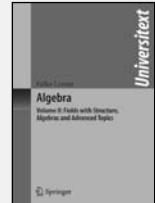
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