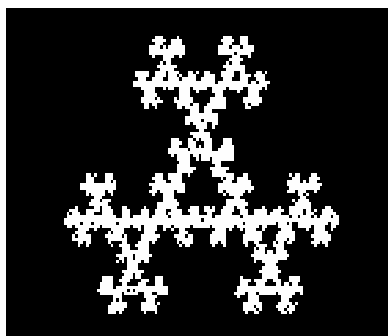


**Atlantic Association for Research
in the Mathematical Sciences
(AARMS)**



**Annual Reports:
2004/2005**

Director's Notes

In early 2005, the management structure of AARMS was completed by the creation of its Board of Directors. I am very pleased that Evan Kipnis, Vice-President Legal Services and Associate General Counsel with Aliant in St. John's, agreed to be its first chair. The fact that Evan also holds an M.Sc. in Mathematics makes him a particularly outstanding choice for this important position. The complete list of the members of the Board can be found below. The inaugural (teleconference) meeting of the Board was held on March 29, 2005.

The annual AARMS summer schools of 2004 and 2005 have built on the early successes of the first two schools of 2002 and 2003. I am particularly pleased that the number of students from Atlantic Canada (as well as from many other provinces in Canada) who were admitted in 2004 and 2005 is now quite substantial: this year, about one third of the students were from the four Atlantic provinces. A more detailed report of the last two schools can be found below. This year brought a change in the location of the AARMS summer schools, as Dalhousie University has agreed to host the schools from 2005 to 2007. They are now directed by Dr. Tony Thompson and Dr. Renzo Piccinini. They continue the impressive leadership provided by the founding director, Dr. Edgar Goodaire (Memorial) during 2002-2004. I would like to use this opportunity to express my gratitude to Edgar for his outstanding role in putting the AARMS summer schools "on the map", both in Canada and around the world.

AARMS continues to play a role, together with CRM, the Fields Institute, and PIMS, in the context of the future of mathematics in Canada. Following a very successful Canadian Mathematics Leadership Retreat at BIRS on October 28-30, 2004, I am now representing AARMS on the Mathematics

Liaison Committee with NSERC. This important committee (chaired by Richard Kane, University of Western Ontario, the former chair of the NSERC Reallocation Exercise) has, as its principal focus, the question on the appropriate future funding envelope for the three Institutes (and, by implication, for AARMS). Among its members are the directors of the Institutes, AARMS, MITACS, the presidents (plus presidents-elect and past presidents) of the CMS, CAIMS and SSC. Recent meetings at York University (October 2005) and Victoria (December 2005) have resulted in very constructive discussions with NSERC; as a result, NSERC has just announced that it will support our request that the Institutes to be put into a single funding envelope with the mathematics GSCs.

The end of 2005 will also bring another change to AARMS, as I pass on the directorship to Dr. Jon Borwein (Dalhousie University) (see the end of this report for more details).

The numerous scientific activities (workshops and conferences; summer schools for graduate students; PDF support; public lectures) are made possible by the generous financial support from the Centre de recherches mathématiques (CRM), the Fields Institute for Research in Mathematical Science, and the Pacific Institute for the Mathematical Sciences (PIMS), with matching funding from Memorial University of Newfoundland, Dalhousie University, the University of New Brunswick (Fredericton), and Acadia University.

Board of Directors

The newly constituted Board of AARMS held its first (teleconference) meeting on March 29, 2005. The members of the board are:

Mr. Evan Kipnis, Vice-President, Legal Services & Associate Counsel General,

Aliant, St. John's, NL (Chair)
Mr. Rod Nolan, Neill and Gunter, Design and Consulting Engineers, Fredericton, NB (Vice-Chair)
Dr. C. Robert Lucas, Dean of Science, Memorial University
Dr. Carl Breckenridge, Vice-President (Research), Dalhousie University
Dr. Gregory Kealey, Vice-President (Research), University of New Brunswick
Dr. George Iwama, Dean of Pure and Applied Science, Acadia University
Dr. François Lalonde, Directeur, Centre de recherches mathématiques (CRM), Montréal
Dr. Barbara Lee Keyfitz, Director, The Fields Institute for Research in Mathematical Sciences, Toronto
Dr. Ivar Ekeland, Director, the Pacific Institute for the Mathematical Sciences (PIMS), Vancouver
Dr. Hermann Brunner, Director, Atlantic Association for Research in the Mathematical Sciences (AARMS)
Dr. Edgar Goodaire, Department of Mathematics and Statistics, Memorial University
Dr. Richard Nowakowski, Department of Mathematics and Statistics, Dalhousie University
Dr. Jon Thompson, Department of Mathematics, University of New Brunswick
Mr. Ron Fitzgerald, Math Resources, Halifax, NS

AARMS Scientific Review Panel (SRP)

Dr. Barbara Keyfitz, Director, The Fields Institute for Research in Mathematical Sciences
Dr. François Lalonde, Directeur, Centre de recherches mathématiques (CRM)
Dr. Ivar Ekeland, Director, Pacific Institute for the Mathematical Sciences (PIMS)
Dr. Mary Williams, Director General, NRC Institute for Marine Dynamics, St. John's, NL
Dr. Dan Kucerovsky, University of New Brunswick

Dr. Bruce Smith, Dalhousie University
Dr. Margaret Beattie, Mount Allison University
Dr. Kenneth R. Davidson, University of Waterloo
Dr. Nassif Ghoussoub, Pacific Institute for the Mathematical Sciences (PIMS)
Dr. Richard Charron, Guigné International, Paradise, NL
Dr. Yuri Bahturin, Memorial University
Dr. John Clements, Dalhousie University
Dr. Jianhong Wu, York University
Dr. Catherine Sulem, University of Toronto
Dr. Lisa Jeffrey, University of Toronto
Dr. Uri Ascher, University of British Columbia
Dr. E. Aubanel, Faculty of Computer Sciences, University of New Brunswick
Dr. Paul Cabilio, Acadia University

Scientific Activities: 2004

1. International Workshop on Wavelets - Theory and Applications

University of Prince Edward Island, April 26-May 7, 2004

Organizer: Nasser Saad (UPEI)

The aim of this two-week workshop was to explore and review the current status of research on wavelets and to stimulate novel theoretical and computational work. This was achieved by a combination of mini-courses and more specialized lectures, with the former having the purpose to acquaint undergraduate and graduate students with this important field of research and to highlight applications to different industrial areas. The format of the workshop also provided ample time for discussions and exchange of ideas between the participants.

The following speakers presented short courses (consisting of between three and five one-hour lectures):

Pierre Vandergheynst, Swiss Federal Institute

of Technology, Lausanne
B. Torrsani, Université de Provence, Marseille
Zuowei Shen, National University of Singapore
Syed Twareque Ali, Concordia University
Bin Han, University of Alberta

These talks were complemented by a number of one-hour talks by another eight experts in the theory and application of wavelets. The format of the workshop was most conducive to discussions and research collaboration.

Support from UPEI, and MITACS for graduate student travel, is gratefully acknowledged.

2. AARMS - CRM Workshop on Singular Integrals and CR Manifolds

Dalhousie University, May 3-8, 2004

Organizers: Galia Dafni, Concordia University and Andrea Fraser, Dalhousie University

The theory of singular integral operators in the context of analysis on CR manifolds on C^n , in particular the Heisenberg group, has been studied and proven fruitful over the years. In recent years, the emphasis has shifted to singular integral operators arising from product kernels on nilpotent Lie groups, which in turn led to the study of flag kernels. The aim of this joint AARMS-CRM workshop was to bring together from around the world, specialists in harmonic analysis, several complex variables, symmetric spaces, and Lie groups. In addition to 16 invited speakers, the workshop featured a short course by Alexander Nagel (University of Wisconsin).

3. Fifth Annual Bluenose Numerical Analysis Day

Acadia University, May 28, 2004

Organizers: Richard Karsten, Holger

Keith Taylor, Dalhousie University
Teismann, Acadia University, Paul Muir, Saint Mary's University, and Ray Spiteri, Dalhousie University

The fact that this year's meeting was held at Acadia is important for its Department of Mathematics and Statistics. In the past few years the mathematics faculty at Acadia has been almost completely renewed; for example, the two Acadia participants in this proposal have been hired in the past three years. It is a goal of these new faculty that Acadia be a strong participant in regional mathematics events. This renewed dedication has led to the strong participation of Acadia faculty in the upcoming CMS/CAIMS/CSFD meeting in Halifax and our recent departmental membership in AARMS. The original Bluenose Numerical Analysis Day was held at Acadia, and "it was with great pleasure that we could host it again."

4. Summer Meeting of CMS: Symposia Supported by AARMS

Dalhousie University, June 13-15, 2004

*** Algebraic Topology**

Organizers: Keith Johnson, Dalhousie University and Renzo Piccinini, University of Milan

This symposium was held during the afternoons of June 13 and June 14. The speakers came from various parts of Canada (St. John's, Halifax, Calgary, Vancouver) and from Italy, Scotland, Spain and the United States. Two of the talks were designed to give the audience a good view of the present research activities in two important areas: Elliptic Cohomology and H-spaces. It was clear that, although the symposium was planned to run on a small format, it had a strong impact on the participants (including graduate students); this has encouraged the organizers to think of planning a similar meeting in the near future.

*** Graphs, Games and the Web**

Organizer: Richard Nowakowski, Dalhousie University

The main focus of this workshop was to examine the core problems in Partizan Kayles- type games. Variants of Partizan Kayles have occurred in many places and have remained unsolved for all but a few special cases. During the three days the discussions centered on the definition and background results, the analysis of different subproblems, and the synthesis of the results for solving a large class of such games. These activities led to collaborations that will form part of the Combinatorial Games Theory workshop at BIRS in June 2005.

This special session was attended by close to 20 researchers, including seven graduate and undergraduate students.

*** Nonlinear Dynamics in Biology and Medicine**

Organizer: Shigui Ruan, Dalhousie University and University of Miami

There were 23 invited talks and one plenary talk (by Mark Lewis, University of Alberta); they covered a broad range of topics on nonlinear dynamics in biology, ecology, epidemiology and medicine by leading experts from Canada, China, France, Germany, Japan and the United States. Ten graduate students and PDFs also participated in this session.

*** Hopf Algebras and Related Topics**

June 13-16, 2004

Organizers: Yuri Bahturin, Memorial University, Margaret Beattie, Mount Allison University, Luzius Grunenfelder, Dalhousie University, Susan Montgomery, University of Symbolic computation plays an essential role in the modern mathematical research. More

Southern California, and Earl Taft, Rutgers University

Some 25 participants of this special CMS session heard three invited lectures by Vladislav Kharchenko, Autonomous University of Mexico, Akira Masuoka, Tsukuba University, Japan, and David Radford, University of Illinois, Chicago, as well as some 20 contributed talks. Mikhail Zaicev, Moscow University, gave a CMS plenary lecture

*** 16th Canadian Symposium on Fluid Dynamics**

Organizers: Richard Karsten, Acadia University and Serpil Kocabiyik, Memorial University

The CSFD has two targeted audiences: active researchers in fluid dynamics and students at the beginning of their careers in this field. Thus, the principal aim of this symposium was to bring these two groups together with leading researchers from Canada and beyond.

The three days of June 13, 14 and 15 saw the presentation of key lectures by Laurette S. Tuckerman (CNRS, France), Ulrike Lohmann (Dalhousie), J. Maciej Floryan (Western Ontario), W. Richard Peltier (Toronto), Frank T. Smith (UCL), Alan C. Newell (Arizona and Warwick), and F. Mary Williams (NRC-IOT); they were complemented by some 35 contributed presentations.

5. AARMS Workshop on Symbolic Computation

Dalhousie University, June 16, 2004

Organizers: Robert Milson and Alan Coley, Dalhousie University, and M. Fels, Utah State University

and more, progress in difficult problems in the fields of differential geometry, relativity, and

mathematical physics requires sophisticated symbolic computation packages and advanced processing capacity. The aim of the workshop was to bring together the developers of leading symbolic geometry packages with the researchers and students who make use of such packages in their work. The format included introductory lectures (by Ian Anderson (Utah State), Evelyne Hubert (INRIA, France), Thomas Wolf (Brock) and Steve Czapor (Laurentian), demonstrations, and hands-on tutorials.

6. International Conference on Nielsen Theory and Related Topics

Memorial University of Newfoundland, June 28 - July 2, 2004

Organizers: Philip Heath, Memorial University, Edward Keppelmann, University of Nevada

This conference continued the well-known series of earlier international meetings in this area (beginning in 1980). It was attended by some 35 researchers and graduate students from 12 countries. The participants heard 25 plenary and contributed talks that provided an illuminating overview of the current state of research in Nielsen theory and its various applications.

7. International Conference on Nonlinear Dynamics and Evolution Equations

Memorial University of Newfoundland, July 6-10, 2004

Organizers: Xiaoqiang Zhao, Xingfu Zou, Andy Foster, Yuan Yuan, Memorial University, Brian Sleeman, Leeds University, and Jianhong Wu, York University.

This workshop was attended by more than 60 participants (including 10 graduate students and PDFs) from 15 countries (Australia, Belgium, Canada, P.R. China, Finland,

Hungary, India, Italy, Japan, The Netherlands, Poland, Slovenia, Spain, Turkey, and USA). The exciting program of 16 plenary lectures and some 40 contributed talks was complemented by a well-attended Public Lecture, hosted by Dr. Chris Loomis, Vice-President (Research), Memorial University, and given by Dr. Pauline van den Driessche, University of Victoria, on "Contributions of mathematical modeling to controlling infectious diseases".

The award "AARMS Distinguished Lecturer" (recognizing excellence in Mathematics and its exposition) was presented to Professor Boju Jiang of Peking University. (See www.math.mun.ca/~aarms for the complete list of AARMS Distinguished Lecturers).

A selection of invited (survey and research) papers reflecting contributions to this conference will appear under the title "Nonlinear Dynamics and Evolution Equations" (H. Brunner, X.-Q. Zhao and X. Zou, Editors) as volume 48 of the Fields Communication Series.

8. 2004 AARMS Summer School

Memorial University of Newfoundland, July 12 - August 16, 2004

Director: Dr. Edgar Goodaire, Memorial University

The third in the series of highly successful summer schools was attended by 30 graduate (and senior undergraduate) students from Atlantic Canada (9), Quebec (4), Ontario (2), British Columbia (3), Austria (1), Croatia (1), Italy (1), Poland (3), Romania (2), Spain (1), Turkey (2), USA (1), each of whom was registered in two of the following four courses offered during the four-week school:

* Number Theoretic Cryptology: Renate Scheidler, University of Calgary

* Statistical Genomics: Priscilla Greenwood, Arizona State University

* Mathematical Biology: Brian Sleeman, University of Leeds, UK

* Number Theory: Michael Bennett, University of British Columbia

Additional details on this and other AARMS summer schools may be found at www.math.mun.ca/~aarms/, under "Summer Schools". AARMS wishes to acknowledge the generous financial support by MITACS and Aliant.

9. APICS 2004: AARMS Symposium on Functional Analysis and Operator Algebra

University of New Brunswick at Saint John, October 17, 2004

Organizers: Dan Kucerovsky and Andrew Toms, University of New Brunswick

During the Fall 2004 APICS Meeting in Saint John, New Brunswick, October 15-17, Professors Dan Kucerovsky and Andrew Toms of the University of New Brunswick, Fredericton, organized a Symposium on Operator Algebras and Functional Analysis. Participants giving talks included Professor Gordon MacDonald of the University of Prince Edward Island (The distance from idempotents to nilpotents), Dr. Hanfeng Li of the Fields Institute (Compact quantum group actions on C^* -algebras), Dr. Zhuang Niu of the Fields Institute (The axiomatic approach to the classification of C^* -algebras), Dr. Ana Savu of Queen's University (Closed and exact functions in interacting particle systems), Dr. Ping Wong Ng of the University of New Brunswick (Amenability of the unitary group of the multiplier algebra of a stable AH algebra), two graduate students from the University of Toronto (Crisitan Ivanescu, Leonel Robert), and the organizers.

The Symposium was a success, having attracted participants from central and eastern Discussions are continuing about making this

Canada, and having featured the premiere of exciting new results in the burgeoning field of compact quantum metric spaces. The opportunity to give talks was extended to senior and junior researchers alike, and graduate students had an opportunity to present preliminary findings and discuss problems with faculty and postdoctoral fellows. We hope to repeat the success of the Symposium in the future.

Scientific Activities: 2005

1. East Coast Combinatorics Conference 2005

University of New Brunswick, January 22, 2005

Organizers: Hugh Tomas (Mathematics), and David Bremner (Computer Science), University of New Brunswick

Despite somewhat inclement weather, which meant that two of our invited speakers enjoyed our hospitality for a day longer than they had planned, the conference went very well. The conference consisted of four hour-long talks by distinguished experts in combinatorics: Bruce Reed (McGill), Igor Pak (MIT), Greg Kuperberg (UC Davis), and Richard Nowakowski (Dalhousie). Part of the point of the format was to allow plenty of time for the participants to engage in informal discussion and networking, and this aspect of the conference was also successful. The conference attracted nearly 40 participants, including representation from Dalhousie and Mount Allison, from Mathematical Sciences and Business of UNBSJ, and from Mathematics, Computer Science, and Administration of UNBF. Of the 39 registered participants attending, there were 11 graduate students, three undergraduates, and one enthusiastic high school student (who stayed for the whole day!).

conference an annual event, which would

move around the Atlantic provinces.

This conference was also supported by University of New Brunswick, Department of Mathematics and Faculty of Science, and by MITACS.

2. Quantum Gravity Workshop

University of New Brunswick, April 28-30, 2005

Organizers: Arundhati Dasgupta, Jack Gegenberg and Viqar Husain, University of New Brunswick

The workshop was attended by approximately 25 participants who heard six plenary talks (90 minutes each, including 30 minutes for discussion). It was followed by the annual one-day Atlantic Relativity Mini-Conference on April 30.

3. Sixth Annual Bluenose Numerical Analysis Day

Cape Breton University, June 10, 2005

Organizers: Shaohua Chen, Cape Breton University, Pat Keast, Dalhousie University, Paul Muir, Saint Mary's University, Ronald Haynes, Richard Karstena and Holger Teismann, Acadia University

The sixth Bluenose Numerical Analysis Day was held at Cape Breton University on June 10, 2005. A total of 35 researchers participated in the meeting (20 researchers, nine graduate students, six undergraduate students), 11 of whom gave presentations. Those attending came from Acadia University, Cape Breton University, Dalhousie University, St. Francis Xavier University and the University of New Brunswick at Saint John.

The one-day meeting brought together faculty, graduate students and honours students, in numerical analysis, applied mathematics, and

computational science. The largest single group came from St. Francis Xavier, brought by a new faculty member there, Jeffery McNally. The facilities (organized by Shaohua (George) Shen, were excellent, and the talks were of a uniformly high standard. The key speaker was Steve Ruuth (Simon Fraser); the title of his talk was Monotonicity-Preserving Time Discretization Methods. The meeting ended with a reception (sponsored by the Dean of Science and Technology, Allen J. Britten, who also opened the meeting).

We are planning on holding a Numerical Analysis day in 2006, with a tentative venue being St. Francis Xavier.

4. 2005 AARMS Summer School

After three years at Memorial University of Newfoundland, the AARMS Summer School has now moved to Dalhousie University. The new directors are Tony Thompson and Renzo Piccinini, and the fourth (2005) edition of the school (July 17 - August 14) offered courses on:

- * Convexity and Fixed Point Algorithms in Hilbert Space: Heinz Bauschke, Guelph
- * Integral Geometry of Convex Bodies and Polyhedra: Daniel Klein, University of Massachusetts, Lowell
- * The Mathematics of Finance: Wolfgang Runggaldier, Padova
- * Mathematical Statistics: Bruce Smith, Dalhousie University

This year, 43 students attended the school, and they represented eight different countries. About half of the students came from seven Canadian provinces (NB, NS, NL, PEI, PQ, and ON).

5. Symposium in Honour of Professor Chris Fields

Dalhousie University, August 15, 2005

Organizer: David Hamilton, Dalhousie University

This symposium on the occasion of Professor Chris Field's retirement attracted close to 50 participants from across Canada, as well as from Australia, Switzerland and the United States. They were treated to six first-rate talks dealing with topics related to Chris's research.

6. NPCDS Workshop on Spatial/Temporal Modeling for Marine Ecological Systems

Dalhousie University, August 17-18, 2005

Organizers: Mike Dowd, Chris Fields, and Joanna Mills Fleming, Dalhousie University, and Rick Routledge, Simon Fraser University

The workshop was sponsored by the National Program on Complex Data Structures (NPCDS), with additional support from the Sloan Foundation and the Atlantic Association for Research in the Mathematical Sciences. The organizers were Michael Dowd, Chris Field, and Joanna Flemming (Dalhousie University), and Rick Routledge (Simon Fraser University).

The purpose of the workshop was to bring together researchers in statistics and marine ecology interested in the development of models for the analysis of the complex temporal/spatial data now becoming available. These data include, for example, animal tracking data as well as time series of biological variables from ocean observing systems. The overall goal was to advance marine ecology through the development and application of new statistical analysis techniques. The workshop provided a forum to both review and facilitate identification of statistical methods and modeling approaches with the potential to address outstanding research questions.

This inaugural workshop was intended to provide a basis for a full proposal to NPCDS. Our plenary speaker was Brian Alspach, from

Those interested in participating or contributing towards such an initiative met on August 19, 2005. On the basis of this discussion some preliminary projects were identified. These include: (i) low dimensional state space models for animal tracking, (ii) particle filters for moderate dimension ecosystem models, and (iii) use of emerging marine spatio-temporal data from DFO - specifics to be decided.

There will also be a special session on the workshop theme at the 2006 meeting of the Statistical Society of Canada, as well as a talk in the NPCDS session of the 2006 Joint Statistical Meetings.

7. APICS 2005: AARMS Symposium/Workshop

Acadia University, October 21-23, 2005

*** Symposium on Graph Theory and Combinatorics**

Organizer: Nancy Clarke, Acadia University

An AARMS Session on Graph Theory and Combinatorics was held at Acadia University in conjunction with the 2005 APICS Mathematics, Statistics and Computer Science Annual Conference. The event was made possible through the generous support of AARMS, with additional support provided by the Department of Mathematics and Statistics and the Office of Research and Graduate Studies at Acadia University.

This event brought together 40 researchers, postdoctoral fellows and students (including 14 graduate students) in graph theory, design theory, and other areas of combinatorics. The graduate students especially benefitted from the opportunity to meet and interact with their peers across the region, as well as to hear the many and varied research interests of faculty.

the Department of Mathematics and Statistics,

University of Regina. Brian is one of the most influential graph theorists of the past 40 years, with 78 publications to date. His research has been ground-breaking in several areas within graph theory, including tournaments, decompositions and factorizations, Hamiltonian connectivity, vertex-transitive graphs, permutation groups and their actions on graphs, and searching networks. Brian delivered a one-hour plenary talk entitled Time constrained searching and sweeping. His interest in searching networks is shared with several researchers in this region.

There were 13 additional speakers, who gave 30-minute talks in one of four sessions. A number of participants from the APICS Conference attended a selection of the talks in this session

***Workshop in Robust and Computationally Intensive Statistical Models**

Organizer: Hugh Chipman, Acadia University

The goal of this workshop was to bring together Atlantic researchers and students in the statistical sciences, with a view to fostering research connections. This event was of a particularly timely nature, as many mathematics and statistics departments in Atlantic Canada have hired new faculty in statistics (and thus increased the number of graduate students) in the last few years. It thus provided an opportunity for these faculty and students to become acquainted and learn about some of the (new and ongoing) research in the statistical sciences in Atlantic Canada. This impressive two-day workshop was well attended; it included two plenary lectures by Chris Field (Dalhousie) and Jim Ramsay (McGill), as well as eight 30-minute contributed talks, some by graduate students. Due to the success of this meeting it was decided to organize similar meetings in the coming years.

Scientific Activities: 2006

1. Dalhousie/AARMS Atlantic Analysis Days

Dalhousie University, January 20-21

Organizer: Jon Borwein (Dalhousie)

For more information see:
www.aarms.math.ca

2. 2006 AARMS Summer School

Dalhousie University, July 16-August 21

Directors: Tony Thompson and Renzo Piccinini (Dalhousie)

During the fifth annual Summer School the following courses will be offered:

* Elliptic Curve Cryptography (Mark Bauer, Calgary)

* Massive Networks and Internet Mathematics (Anthony Bonato, Wilfrid Laurier University)

* Introduction to Algebraic Geometry (Rick Miranda, Colorado State University)

* Introduction to Wavelet Theory and Numerical Applications (Anita Tabacco, Polytechnical University, Torino/Italy)

For more information see:
www.mathstat.dal.ca/~aarms/summerschools

AARMS Postdoctoral Support Program

Following the second competition (January 2005) for postdoctoral fellowship support, the Scientific Review Panel of AARMS recommended that the following researchers be given partial funding:

* Dr. Sigbjorn Hervik (Dalhousie University);

one year)

* Dr. Oliver Winkler (UNB at Fredericton; one year)

* Dr. Kia Dalili (Dalhousie; two years).

Not surprisingly (given the success of the PDF programs at CRM, the Fields Institute, and PIMS) we received 13 outstanding applications.

The 2006 competition was announced at the end of November 2005 (www.math.mun.ca/~aarms, see under: News: November 2005 for details).

AARMS is presently working on doubling the number of PDFs that it will support in a given year.

Regional Centre of Excellence at University of New Brunswick

In addition to the above events, AARMS is pleased to support the newly created "Center for Research in Operator Algebras" at the University of New Brunswick. The center was approved by the University of New Brunswick in the spring of 2005; its current director is Dan Kucerovsky, and its international advisory board includes leading researchers from Canada, USA, Denmark, and France. For details see:

(http://erdos.math.unb.ca/~dan/COPAL/Centre_main.htm).

New Director of AARMS

As I indicated at the beginning of the report, my term of Director of AARMS has ended. I am very pleased to announce that the search committee established earlier this year by the AARMS Scientific Review Panel and consisting of four members of the SRP and the AARMS Board of Directors has recommended to the Board that Dr. Jonathan Borwein (FRSC), Canada Research Chair, Faculty of Computer Science, Dalhousie University, be the new Director of AARMS. Jon's appointment, and that of the Deputy Director, Dr. Richard Wood, Dalhousie University, will be formally approved shortly

by the Board of Directors. I am convinced that under Jon's leadership AARMS will play an even stronger role in the mathematical sciences, not only in Atlantic Canada but in the entire country and internationally. His status as a well-known mathematician and as a leader in the world of mathematical sciences will be major assets for the future of AARMS.

During my six years as Director of AARMS I have received invaluable advice and help from the past and current directors of the three mathematical institutes in Canada. Thus, I would like to take this opportunity to thank personally and on behalf of AARMS the former directors, Nassif Ghoussoub (PIMS), Ken Davidson (Fields), and Jacques Hurtubise (CRM) for their crucial support in putting AARMS, in 2002, on a viable long-term financial basis. I, and AARMS, are also deeply indebted to their successors, Ivar Ekeland (PIMS), Barbara Lee Keyfitz (Fields), and François Lalonde (CRM) for their constructive collaboration and for strengthening the commitment of their institutes to AARMS and its future.

AARMS would, of course, not exist in the present form without similar commitments and financial support by Dalhousie University, Memorial University of Newfoundland, the University of New Brunswick, and Acadia University. Thus, I would like to express my gratitude, to these institutions and their senior administrators.

Finally (but not least!), I would like to acknowledge the administrative support I have received from Memorial University and its Department of Mathematics and Statistics during my term as Director of AARMS. My special thanks go to the secretarial staff of the department: Wanda Heath, Rosalind English, Jackie Costello, and (especially) to Leonce Morrissey who acted as the (unofficial) AARMS secretary whenever I needed help.