Newsletter *Winter 2010*

Atlantic Algebra Centre:
minicourse by Dr. Vlastimil Dlab
and future plans

In the fall of 2009 the Atlantic Algebra Centre invited Dr Vlastimil Dlab, FRSC, Professor of Carleton University. From October 4–10, he delivered the 9th AAC mini course "Representations of finite-dimensional algebras". As usual for the fall semester minicourses, this was attended also by the students of the regular graduate course, this time "Advanced linear algebra". Later the material of the minicourse was used in some presentations given by the students of this course, at the end of semester. The minicourse was attended by undergraduate honours students, graduate students and the faculty. One of the audience was Dr Kenneth Price of University of Wisconsin, USA, who visited AAC for about a month. He and another visitor from USA, Dr Alon Regev of University of Illinois, gave talks at our Algebra Seminar.

In October 2009 we received from Springer-Verlag the copies of a special issue of the Journal "Acta Applicandae Mathematicae" composed of the papers submitted to AAC organized International Workshop "Groups, Rings, Lie and Hopf Algebras. II". The workshop was held in August 2007 at Bonne Bay Marine Station of Memorial University. The guest editors of the issue were Yuri Bahturin and Mike Parmenter.

Since September 1, 2009 AAC has hosted an AARMS postdoctoral fellow Dr Eugene Chibrikov. In addition to AARMS funding his stay is supported by a grant from AAC and personal discovery grants of several faculty members. Recently we were happy to learn that another AAC backed candidate, Dr Alexei Gordienko of Moscow State University, is among the winners of 2010 AARMS postdoctoral competition and will come to AAC as of September 1, 2010.

Future plans of AAC include the 10th AAC mini course by a famous algebraist, Professor Donald Passman of University of Wisconsin – Madison, USA, during the last week of March 2010. He will speak on the basics and the latest progress in the solution of a hard problem of semiprimitivity in group algebras. The mini course will be integrated with a regular course, named "Ring Theory", delivered at MUN in Winter semester, 2010. Also, close to this time, AAC will carry out the Fourth Undergraduate Algebra Competition for the students of universities of Atlantic Canada. As usual, the three winners will be awarded book prizes.

From July 18 – 23, 2010, AAC will host an International Workshop "Infinite-dimensional Lie Algebras". This is the "second edition" of the International Workshop "Locally finite Lie algebras" held at Banff International Research Station from August 30 - September 04, 2003. This time the organizing Committee includes Yuri Bahturin (MUN), Slava Futorny (University of Sao Paulo, Brazil), Mikhail Kochetov (MUN) and Ivan Penkov (Jacobs University Bremen, Germany). The invited lectures will be given by prominent mathematicians from Germany, Russia, UK and USA. As usual, AAC will support young participants: undergraduate and graduate students and postdoctoral fellows. The venue of the workshop is Bonne Bay Marine Station of MUN, proved to be such an excellent place back to August 2007.

For more information: www.math.mun.ca/~aac

- Yuri Bahturin, AAC Director

News

Support from the Provinces of New Brunswick and Nova Scotia

AARMS is very pleased to announce, beginning in 2009, a five-year funding commitment from the Provinces of New Brunswick and Nova Scotia, which will enable us to greatly expand our activities, especially focusing on Postdoctoral Fellowships, conferences and workshops and both industrial and educational outreach. The New Brunswick Department of Post Secondary Education, Training and Labour has committed $250,000 over five years and the same amount is promised by the Nova Scotia Department of Labour and Workforce Development, Office of Economic Development and Department of Education. As well as the activities outlined above, this additional funding will enable us to further support Collaborative Research Groups in our region. Further announcements will be forthcoming about how to apply for funding in this area.

CAIMS - SCMAI Annual Meeting

The 2010 Annual Meeting of the Canadian Applied Mathematical and Industrial Society will be hosted by the Department of Mathematics and Statistics at Memorial University, in St. John's, Newfoundland, Canada on July 17-20, 2010. The themes of this meeting are

- Dynamical Systems
- Fluid Dynamics (CSFD-2010)
- Mathematical Biology and Medicine
- Mathematical and Theoretical Physics
- Nonlinear Dynamics and Control
- Ocean Modeling and Technology
- Scientific Computing
- Statistical and Population Genetics

There will be eight plenary lectures and numerous invited talks (20 minutes) on the above themes, and two special invited lectures. Plenary Speakers:

Anthony Bloch (University of Michigan)
Marianna Braza (L'Institut de Mcanique des Fluides de Toulouse)
William F. Langford (University of Guelph)

Robert M. Miura (New Jersey Institute of Technology)
Bernard Molin (Ecole Centrale Marseille)
Bruno Nachtergaele (University of California at Davis)
Robert D. Russell (Simon Fraser University)
Elizabeth A. Thompson (University of Washington, Seattle)
Michael J. Ward (University of British Columbia)

In addition to these, we also call for minisymposia on any topics in applied mathematics with a deadline being May 1, 2010. If you wish to organize a Minisymposium, please send the name of the organizer(s) and participants, their affiliation and e-mail contact information and titles of the talks to one of the co-chairwomen of the CAIMS*SCMAI 2010 Scientific Program by the address given below.

There will also be several contributed sessions, as well as a poster session for graduate students to present their research results.

In the meeting, the annual CAIMS*SCMAI Research Prizes and CAIMS Doctoral Dissertation Award will be presented to the recipients. In addition, student poster prizes will also be selected and awarded. For more information about this meeting, please visit the website: www.caims2010.ca which will be updated in a timely fashion, or contact one of the co-chairwomen of the CAIMS*SCMAI 2010 Scientific Program Serpil Kocabiyik (serpil@mun.ca), Sharene Bungay (sharene@mun.ca)

AARMS Call for Proposals

We encourage mathematicians in Atlantic Canada to suggest programmes or themes for future AARMS activities in the region (workshops, conferences, periods of specialization and exceptional opportunities). Proposals for short workshops with total requests for AARMS funding less than $5,000 are evaluated by the executive while more extensive proposals are referred to the Scientific Review Panel and responses will be given as quickly as possible. Proposals are usually expected to show a detailed program with a significant number of confirmed speakers. Deadline for submission: May 15, 2010

Summer School 2010

The ninth annual AARMS Summer School will take place July 11 though August 7, 2010 at the University of New Brunswick in Fredericton. As always, we have an interesting array of graduate-level courses:

Riemannian Geometry
Eric Woolgar (Alberta)
Noncommutative Geometry
Masoud Khalkhali (Western Ontario)
Noncommutative Algebraic Geometry
Michael Wemyss (Oxford)
Biostatistics
Christian Boudreau (Waterloo)
and June Lim (Saskatchewan)

Please encourage your graduate students to take advantage of this opportunity! Remember that AARMS covers all on-site expenses; and we will facilitate transfer credit. For more information contact Barry Monson (bmonson@unb.ca), or visit http://www.aarms.math.ca/summer.

APICS 2009 Conference a Big Success

The goal of APICS (Atlantic Provinces Council on the Sciences) is to promote research in the Atlantic Provinces. To that end a mathematics/statistics/computer science conference is held each year to promote graduate studies. The conference is attended primarily by undergraduate students. Students are encouraged to give talks and take part in various competitions. As well as lectures given by local professors, graduate students and undergraduates, two or three keynote talks are given by well know academics.   The 2009 conference was held in the Math Dept and the Computer Science Faculty at Dalhousie University October 23-25.   The guest speakers were Carl Bender from Washington University in St. Louis and Holger H. Hoos from the University of British Columbia. The conference was attended by 83 undergraduates, 35 graduate students and 35 faculty from universities all over the Atlantic region. There were 23 undergraduates who gave presentations and all of the graduate students presented results.

Cdn Number Theory Association Conference at Acadia

The eleventh meeting of the CNTA is scheduled to take place on July 10-16, 2010, at Acadia University in Wolfville, Nova Scotia.   The conference will feature 12 plenary lectures, including a talk given by the winner of the 2010 Ribenboim Prize (an award for distinguished research in number theory), and a Public Lecture by Ken Ono, which will be advertised to the general public.   Historically, the Conference has also included more than one hundred lectures in several Special Sessions, covering areas in Algebraic Number Theory, Analytic Number Theory, Arithmetic Geometry, Computational Number Theory, and Diophantine Equations, and plans are to have a similar number of talks. For more information contact Jeff Hooper (jeff.hooper@acadiau.ca).

People

People on the move

We would like to thank **Ron Fitzgerald**, President of MathResources Inc. for his term of service on the AARMS Board from 2006 to 2010.   Ron's contributions, from his private sector background both on the Board and on the Financial Subcommittee have been a welcome contribution over the past few years.   **Robert Raeside** is also stepping down fromt the Board as his term of Acting Dean of Science at Acadia has come to an end. Robert is replaced by **Peter Williams**, the new Dean of Science. Thanks to Robert for all your help over the past few years, and welcome to Peter.

At the same time, there have been a few new additions to our Scientific Review Panel. AARMS welcomes **Juris Steprans**, joining us to represent the Fields Institute, **Leah Keshet** from PIMS and **Jim Loveys** from CRM who has been helping the SRP with our annual Postdoctoral Fellowship assessments. The AARMS Executive has also welcomed some fresh faces: **Paul Muir** from Saint Mary's and **Jacques Allard** from U. de Moncton join us, expanding the Executive to 6 members and giving us a wider perspective on our community.

Recent and Upcoming Events

Sixth Annual East Coast Combinatorics Conference
April 29-30 at Saint Mary's University
contact Art Finbow (art.finbow@smu.ca)

Workshop on the Mathematics of Invasive Marine and Forest Species
June 2-3 at UNB Fredericton
contact James Watmough (watmough@unb.ca)

CMS Summer Meeting
June 4-6 at UNB Fredericton
contact Gertrude Jeewanjee (meetings@cms.math.ca)

Workshop on Mathematical Biology
June 7-8 at UNB Fredericton
contact James Watmough (watmough@unb.ca)

38th Canadian Operator Theory and Operator Algebras Symposium
June 7-11 at UNB Fredericton
contact Dan Kucerovsky (dkucerov@unb.ca)

CMS Satellite Workshop on Noncommutative Geometry
June 7-9 at UNB Fredericton
contact Bahram Rangipour (bahram@unb.ca)

Canadian Number Theory Conference
July 10-16 at Acadia University
contact Jeff Hooper (jeff.hooper@acadiau.ca)

CAIMS Annual Conference
July 17-20 at Memorial University
contact Serpil Kocabiyik (serpil@mun.ca)

Infinite Dimensional Lie Algebras - International Workshop
July 18-23 at the Atlantic Algebra Centre, MUN
contact Yuri Bahturin (bahturin@mun.ca)

Biostatistics and Epidemiology Conference
August 23-24 at UNB Fredericton
contact Renjun Ma (renjun@math.unb.ca)

APICS meetings on Mathematics and Computer Science
October 15-17 at Saint Mary's University
contact Paul Muir (paul.muir@smu.ca)

Coast to Coast Seminar Series (Winter Theme: High Energy Physics)

Pierre Savard, January 19, 2010
Michel Vetterli, February 2, 2010
Rob McPherson, February 16, 2010
Scott Oser, March 2, 2010
Robert Kowalewski, March 16, 2010
Cliff Burgess, March 30, 2010

For connection details ask the technician of your videoconferencing facility to contact Scott Wilson (Scott.Wilson@Dal.ca)

I think computer viruses should count as life. I think it says something about human nature that the only form of life we have created so far is purely destructive. We've created life in our own image.
- Stephen W. Hawking