

Department of Mathematics

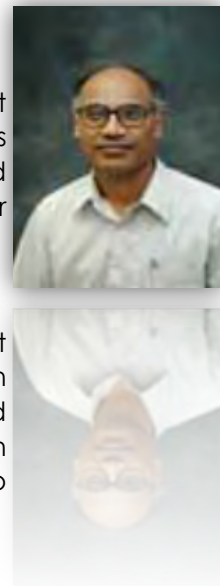
Fall Newsletter

October 2011

Message from the Chair

Once again this has been a year that the Department can look back on and be proud of.

This year has seen a number of accomplishments throughout the department and at various levels of our faculty, students and staff. This includes a number of awards, grants and fellowships being awarded, including a Sloan Fellowship for Mark Braverman.



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This upcoming year holds the hope for a continuation of great things from our Department members. We are once again focusing on building our core strengths in research and teaching, building on a strong history of awards and recognition for our faculty and looking at ways to bring their knowledge to the world.

As part of that initiative we are moving forward with the proposed Center for Applied Mathematics and Statistics. This should make available new opportunities for collaboration for our faculty and new areas of study for our students. With the help of our undergraduates, and the Fields Institute, we now have FUN – the Fields Undergraduate Network. FUN organizes seminars and other events to bring undergraduates closer to the research activity. Finally, I am pleased to announce that we are working in partnership with the CMS and Laval University to bring the Canadian Open Mathematics Competition (COMC) to students in grades 9 – 12 across Canada this year. This is a breakthrough in terms of our ability to reach high school students.

Please join me in celebrating the achievements of the Department and looking forward to the accomplishments of the upcoming year.

Administrative Officers

Murty, V. Kumar (Chair)
 Colliander, Jim (Associate Chair)
 Sulem, Catherine (Associate Chair, Undergraduate)
 Bar-Natan, Dror (Graduate Coordinator)

Mathematical Sciences Library

Garrod, Bruce (Librarian) mathlib@math, x88624
 Robertson, Jennifer (Librarian)
 Vaez, Haleh (Library Technician)

Administrative Support Staff

- Birch, Donna
 Undergraduate Administrator (dbirch@math, x85082)
 Responsible for undergraduate matters and student counseling.
- Brittain, Pamela
 Executive Assistant to the Chair (pamb@math, x83317)
 Provides secretarial services to the Chair; letters for visitors; tenure; promotion; academic search; CRC applications; seminar announcements.
- Bulat, Ida
 Graduate Administrator (ida@math, x87894)
 Graduate matters and student counseling.
- De la Cruz-Heredia, Marco
 Computer Systems Administrator (marco@math, x87893)
 Provides technical guidance and tutorial service for faculty, staff and students; assists in maintaining our computer systems.
- LeBlanc, Emile
 Systems Manager (leblanc@math, x83950)
 Responsible for the operation of the Department's computing system.
- Leonardo, Diana
 Financial Assistant (dianal@math, x83460)
 Accounts payable, accounts receivable, research accounts, teaching assistants payroll and records, postdocs and visitor payments.
- Leslie, Beverley
 Department Manager (leslie@math, x85194)
 Administration of the Department, supervision of administrative staff, research assistant to the Chair, departmental budget.
- Merisca, Jemima
 Department Office & Academic programs Assistant
 (jmerisca@math, x83822)
 Provides departmental secretarial services and manuscript typing, types NSERC applications and final exams, graduate and undergraduate office support and handles Postdoctoral Fellowship matters.
- Seepersaud, Patrina
 Receptionist (pseeper@math, x83323)
 General and manuscript typing, duplicating requests, keys and visitors; TA applications and database

Announcements

New Appointments

Balint Virag, was promoted to the rank of full Professor effective July 1, 2011.

Larry Guth, was promoted to the rank of Associate Professor effective July 1, 2011.

Leo Goldmakher, former UTSC Postdoc, has been hired as an Assistant Professor at UTSC effective July 1, 2011.

Diana Leonardo, was promoted to the position of Financial Assistant effective July 1, 2011.

Patrina Seepersaud, was hired as Receptionist effective August 1, 2011.

Retirement News

Felix Recio retired on June 30, 2011 and is now a Senior Lecturer Emeritus; although Felix is officially retired, he will continue to teach the PUMP program and will be supporting the Undergraduate office with students counseling when necessary.

Faculty on Leave

July 1, 2011 to June 30, 2012

Larry Guth, Henry Kim, Eckhard Meinrenken, Jeremy Quastel, Paul Selick, Mark Braverman

January 1, 2012 to June 30, 2012

Ilia Binder, George Elliott

January 1, 2012 to December 31, 2012

Robert McCann, Fiona Murnaghan



New Postdoctoral Fellows

Surname	First Name	Sponsor(s)	Field of Research
Athavale	Prashant	Nachman, G. Wright, Fields	Partial differential equations
Climenhaga	Vaughn	Khanin, UTM	Dynamical systems, ergodic theory, statistical mechanics
Dabkowski	Michael	Khanin, UTM	Harmonic analysis and active scalar equations
Deltour	Guillaume	Jeffrey, UTSC	Symplectic geometry, geometric invariant theory
Dodd	Christopher	Kamnitzer, Arkhipov, NSF Fellowship	Algebraic geometry
Egli	Daniel	Sigal, Colliander, Sulem, Jerrard	Quantum theory
El Smaily	Mohammad	NSERC	Elliptic and parabolic non-linear partial differential equations
Galvao-Sousa	Bernardo	Jerrard, The Hospital for Sick Children	Calculus of variations, nonlinear PDEs
Hoell	Nicholas	Nachman, MITACS	Functions of complex variable
Mondal	Pinaki	Milman, Bierstone, Kamnitzer, Friedlander, Bland, Arkhipov, Elliott	Algebraic geometry
Morra	Stefano	Kudla, Herzig, Fields	Number theory
Pike	Brian	Buchweitz, UTSC	Algebraic geometry, singularity theory, free divisors
Rayan	Steven	Gualtieri	Algebraic geometry
Rinot	Assaf	Todorcevic, Ilijas, UTM	
Seis	Christian	McCann, Jerrard, Burchard	Partial differential equations
Shao	Chung Tse Arick	Alexakis, Colliander	Partial differential equations
Shaw	Kristin	Karshon, UTM	
Thind	Jaimal	Khanin, UTM	
Tyros	Konstantinos	Todorcevic	Combinatorics, functional analysis
Voda	Mircea	Graham, Blomer, UTM	Geometric function theory

Graduate News

This year we have 131 graduate students registered with the School of Graduate Studies:

22 Master's students, 4 part-time Master's students, 98 PhD (4 new + 10 continuing from our master's program + 84 continuing), 3 Special students (1 exchange student + 2 non-degree students), and 4 visiting students registered in other programs abroad and in Canada, and are here for periods of 6 months to 1 year.

Birth Announcements



Congratulations to:

Ilia Binder and his wife **Masha** on the birth of their daughter **Hannah Rebecca Binder** on September 21, 2011.

Joel Kamnitzer and his wife on the birth of their daughter, **Sonia**, on May 7, 2011.

Spyros Alexakis and his wife **Milena** on the birth of their daughter **Elena** on November 22 2010.

Honours and Awards



Congratulations to all of our award winners!

Rollo Davidson Prize

Professor **Gábor Pete** was jointly awarded this year's Rollo Davidson Prize along with Dr. Christophe Garban from Ecole Normale Supérieure de Lyon.

Sloan Award

Professor **Mark Braverman** won one of this year's prestigious Sloan Fellowship Awards.

Cressy Award

This year **Sergio DaSilva**, co-president of the Math Union was one of 15 winners of a Cressy Award.

The awards are given for outstanding volunteer service to the faculty, their departments and the university and for their contributions towards enhancing student experience.



Sergio
Da Silva

Contests & Competitions

DeLury TA Award

We are happy to announce that this year's winners of the Daniel B. DeLury Teaching Awards for graduate students in mathematics are:

- ❖ **Karene Chu**
- ❖ **Bruce Fontaine**
- ❖ **Henning Petzka**



AMS Centennial Research Fellowship

Andrew Toms has been awarded this year's AMS Centennial Research Fellowship. He is a former PhD student of Professor George Elliott's and he is now a Purdue

Artin Junior Prize

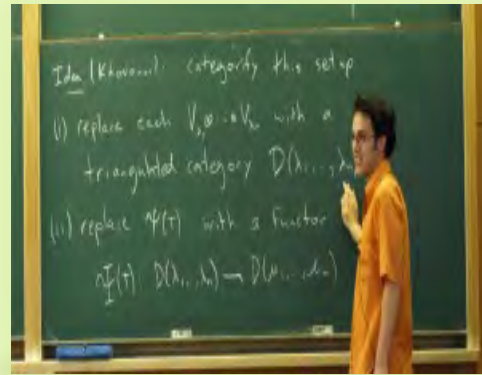
Dr. Hrant Hakobyan a former Postdoctoral Fellow, has been awarded the 2010 Emil Artin Junior Prize in Mathematics.

2010 Malcolm Slingsby Robertson Prize

Dr. Ian Zwiars is the winner of this year's Malcolm Slingsby Robertson prize. This prize is awarded to a graduating PhD student who has demonstrated excellence in research.

2011 André-Aisenstadt Prize

Professor Joel Kamnitzer was awarded the 2011 André-Aisenstadt Prize which is given for research achievement in pure and applied mathematics.



Professor Joel Kamnitzer in Kyoto at RIMS for a conference in May, 2007. Photo courtesy of Professor Dror Bar-Natan.

Atkinson Award

Brian Smithling and Magdalena Czubak are the winners of the inaugural Frederick V. Atkinson Teaching Award for Post-doctoral Fellows.

2010 Putnam Results

Konstantin Matveev was the best Canadian contestant and among the top twenty in North America. He will receive the Nathan Mendelsohn Prize for this honour.

In addition, **Alexander Remorov** received an honorable mention with the score among the thirty best in North America. Keith Ng and Jonathan Zung also ranked in 101-200 range.

The University of Toronto team consisting of **Alexander Remorov**, **Konstantin Matveev** and **Sida Wang** ranked tenth.

Congratulations to all our participants! Pictures of the reception that took place on May 4, 2011 are below:



2011 Undergraduate Mathematics Competition

The eleventh annual University of Toronto Undergraduate Mathematics Competition was written on Sunday, March 6, 2011. There were twenty-six candidates writing on all three campuses.



We would like to thank Nick Cheng for organizing the Scarborough site and John Inciura for organizing the Mississauga site.



Rankings

Honour students in order of rank [Scores 27-58]

1. Remorov, Alexander III AS Mathematics & Statistics
1. Ng, Keith III AS Mathematics & Physics
3. Sagatov, Sergei IV AS Mathematics
4. Chen, Philip II Engineering Science
5. Sun, Fengwei UTSC
6. Huo, Jungwei II AS Economics & Statistics
7. Hua, Mengdi II AS Economics

Second category in alphabetical order [Scores 10-21]

Baydina, Viktoriya II AS Mathematics & Physics
Dhillon, Amanjit I Engineering Science
Guo, Kinyan
Hu, Shufeng
Jiang, Lin
Kidwai, Omar
Park, Sang Hee
Rumsey, Susan Elizabeth

There were 11 additional candidates with scores in the range 0 to 6.

Congratulations to the candidates for their participation and solutions to the problems.

Other Announcement



Mathletes do it again!

The winning runners were captained by **Elio Mazzeo**, and included **Alex Bloemendal**, **Nataliya Lapyeva**, **Robert McCann**, **Matt Rideout**, **Didier Smets**, and **Mitsuru Wilson**. They reached the podium at a time of 3:2:34.6, five minutes less than last year's run when the team came in second.

On the same day, our graduate student Henning Petzka finished third in the half marathanon at a time of 1:14:48.0.

Thanks to the members of the department who contributed money to help towards the cost of running. Congratulations, Mathletes and Henning, we're very proud of you all



IT Updates

The main computing help page is at:

<http://www.math.toronto.edu/cms/computing>

(or click "About" then "Computing" from the main departmental page).

There you will find information about email and spam filtering, wireless networking, contacting people for help, setting up blogs and wikis, and so on. There is a Search button on the upper right corner of the main departmental webpage and that can be helpful for finding information.



A very short introductory page is available at:

<http://www.math.toronto.edu/intro2011.html>

The IT Status blog at:

<http://blog.math.toronto.edu/itstatus>

has important information about the state of the departmental computing systems. Please note that Wednesday afternoons are the usual times for system updates and that the departmental computer systems could be down at those times (if possible warnings are given when systems need to be taken down).

Printing



The main printers are “lw2” in the mail room (Room 6290A) and “lw3” in the computer room (Room 6200). There are other printers in various other buildings on campus where the math department has offices.

If these printers run out of paper or if the toner is low please see Patrina at the front desk.

The “pdftk” command has been installed for PDF file manipulation. Try “pdftk --help” for more information.

We have a local command “Print” for handling most print jobs and running “Print -d file” will display the file on your screen (if you are running an X server) and you can preview what will be printed. Running just “Print” will give a summary of options for the Print command (for example “-M” selects manual feed).

Departmental Information

Telephone Number (416) 978-3323
FAX Number (416) 978-4107
Home Page www.math.utoronto.ca
Mathematical Sciences Library (416) 978-8624
Address Department of Mathematics
University of Toronto
40 St. George Street, Room 6290
Toronto, Ontario M5S 2E4 CANADA

Emergency Contacts

Emergency: 911 (dial additional 9 first if calling from a dept. phone)
Campus Police:
416-978-2222 (emergency)
416-978-2233 (non-emergency)
Emergency Building Maintenance:
416-978-3000
Caretaking:
416-978-6252

