

# Notre Dame Math Newsletter

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## Inaugural Issue

This is the inaugural issue of the Notre Dame Mathematics Newsletter. We plan to put out a newsletter every Fall and Spring semester with the hopes of keeping all of our majors, faculty, and alumni up to date with all of the activities and celebrations going on in the department.

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## NSF Awards for Alumni

This past spring three of our alumni were winners of prestigious NSF awards. Mitchell Faulk (ND '14) was awarded an NSF Graduate Research Fellowship to continue his studies in mathematics at Columbia University. Additionally Andy Manion (ND '09) and Ben Fehrman (ND '08) both were awarded NSF Postdoctoral Fellowships. Andy just finished a Ph.D. at Princeton in mathematics and Ben just finished a Ph.D. in mathematics at the University of Chicago.

Congratulations Mitchell, Andy, and Ben!

## Bourbaki Seminar

Professor Sergei Starchenko was invited to give a lecture in the Bourbaki Seminar. The Bourbaki Seminar is a series of seminars which has been held in Paris since 1948. It is one of the major institutions of contemporary mathematics, and a barometer of mathematical achievement. Professor Starchenko will give a lecture on the work of Ehud Hrushovski, Anand Pillay (another one of our professors), and Pierre Simon.

Congratulations to both Sergei and Anand!

## Notre Dame teaching award

Professor Jeffrey Diller was a recipient of the Rev. Edmund P. Joyce, C.S.C. Award for Excellence in Undergraduate Teaching in 2015. This is an award which honors faculty members who have had a profound influence on undergraduate students through sustained exemplary teaching.

Congratulations Jeff!

## Undergraduate - Important Dates

- Math 4 Everyone - There will be 2 Math 4 Everyone lectures this semester. Thomas Banchoff (ND B.A. '60) will speak on October 8 at 5pm in 101 Jordan Hall. Joe Gallian (ND Ph.D. '71) will speak on November 12 at 5pm in 127 Hayes-Healy Hall.
- LaTeX Seminar - October 14, 7:30pm-9pm in Hayes-Healy 229.
- Registration begins (don't forget to pick up your PINs) - November 16
- Math Major Career Mentoring Night - November 11, 5pm-7pm in Hurley Hall 258.
- Putnam Exam - Saturday December 5 from 10am until 1pm and 3pm until 6pm.

## Undergraduate - Get ready for next summer!

Even though summer just ended, it is not too early to start thinking ahead to what you might do next summer. In addition to various internships, students might consider doing summer research in either pure or applied fields of mathematics. The AMS maintains a list of NSF funded REUs (Research Experiences for Undergraduates) at the following website: <http://www.ams.org/programs/students/emp-reu>.

Additionally students can apply to the SURF program (<http://science.nd.edu/research/undergraduate-research/opportunities/on-campus/>) to stay on campus to work on research with a professor here.

For more information about summer research opportunities contact either Professor Diller ([diller.1@nd.edu](mailto:diller.1@nd.edu)) or Professor Mapes ([smapes1@nd.edu](mailto:smapes1@nd.edu)).

ial questions, information session requests, or questions concerning our members is welcome to contact [actuary@nd.edu](mailto:actuary@nd.edu) or [skent1@nd.edu](mailto:skent1@nd.edu)

## Undergraduate - Balles Award

Robert P. Balles is a retired California Community College mathematics professor, retired businessman, and private investor. His mission is to recognize and reward the most outstanding majors entering their senior year at the University of Notre Dame. The 2015 recipients of this award are Jonathan Vandenburg and Eun Seuk Choi. Congratulations Jonathan and Eun!

## Undergraduate - Club News

### • From the Math Club

The Notre Dame Math Club prides itself in applying mathematics through various fun and educational activities that individuals of all majors and concentrations will enjoy. Our goal is to make math fun! Throughout the semester, the Notre Dame Math Club will host various activities and events, including Math for Everyone lectures that highlight usage of mathematical concepts and ideas in everyday life, volunteer tutoring for elementary students at the Riverbend Community Math Center in South Bend, club meetings applying math through friendly competitions and card games, and much more. Math is the same in all languages; the Notre Dame Math Club hopes to speak to all students and help them realize how fun and ubiquitous math can be!

### • From the Actuarial Club

The Actuarial Science Club of Notre Dame is proud to announce that we have had information sessions from Windhaven Insurance, Aon Hewitt, and State Farm already this semester. These companies came to speak on their role in the actuarial world and the opportunities they have for aspiring actuaries and other mathematically oriented students.

The club is also excited for a few events in October, including a visit from XL Reinsurance COO, Chris Dougherty; a talk from Nyhart CEO, Tom Totten entitled "Math Major + Entrepreneurial Intent sometime = C Suite"; and a talk from Charles Emma, Managing Principal at EVP Advisors, Inc. on the P&C actuarial world. Anyone interested in contacting the club—especially regarding general actuar-

## From the Graduate Student Association

The Mathematics Graduate Student Association (MGSA) holds a biweekly seminar called the Graduate Student Seminar (GSS) in which graduate students inside and outside of math give lectures on various interesting topics. Our next GSS talk will be on Monday, October 12th at 4pm in Hayes Healy 129. Everyone is welcome, and encouraged, to attend! More info on the MGSA and GSS can be found at our website [nd.edu/mgsa](http://nd.edu/mgsa).

## Graduate Student Awards

### • Richard Sady Prize

Richard Sady (Ph.D. Mathematics, Notre Dame, 1977) was a witty, clever grad student at Notre Dame. He was very popular around here for his mordant commentary and his good humor. He wrote an excellent thesis in Geometric Topology (classifying free involutions on homotopy complex projective spaces). He was a promising mathematician.

He then became an Assistant Professor at UNC Pembroke. Sadly, he suffered from a rare blood disease to which he succumbed in 1982.

His friends here among former grad students and our faculty, as well as his widow and relatives, then contributed to establish the prize in his name that is awarded to our best second year graduate student based on his/her performance in the basic courses they took in their first year.

The 2015 winner of the Sady Prize is Yichao Li. Congratulations Yichao!

- **Rosalie O'Mahony Award**

Rosalie O'Mahony is a former math professor at the College of San Mateo. Since her retirement, she has been active in public life in Burlingame, California. She has been mayor, and city council member and has served on numerous boards and committees. For the past several years she has donated money to our department for support of women graduate students in the first and second year of the Ph.D. program.

This year Rachel Alvir and Whitney Liske are the recipients of this award. Congratulations Rachel and Whitney!

- Samuel Perez-Ayala - University of Puerto Rico Rio Piedras
- Michael Perlman - University of Illinois at Chicago
- João Santos - Institute Superior Técnico, Portugal
- Fangchi Yan - Chinese Academy of Sciences
- Jinhe Ye - National University of Singapore, China

## Welcome new Graduate Students

The math department welcomes our new graduate students.

- Rachael Alvir - Saint John's College at Santa Fe
- Tim Champion - Princeton University
- Derric Chien - University of California Berkeley
- Gabriella Clemente - City College of New York
- Kyle Gannon - University of Chicago
- Léo Jimenez - University of Paris 6, France
- Xiaoxiao Li - Capital Normal University, China
- Adam Moreno - Central Michigan University
- José Pastrana - University of Puerto Rico Rio Piedras

## Welcome new faculty and visitors

The math department would like to welcome our new visiting professors.

- Prasit Bhattacharya - Prasit will be working with Mark Behrens, and is coming here from Indiana University.
- Gabriel Conant - Gabriel will be working with Sergei Starchenko and Anand Pillay and is coming from University of Illinois at Chicago.
- Curtis Pro - Curtis will be working with Karsten Grove and is coming from the University of California Riverside.
- Dylan Rupel - Dylan will be working with Misha Gekhtman and is coming from Northeastern University.
- Haomin Wen - Haomin will be working with Karsten Grove and is coming from University of Pennsylvania.