

University of Michigan Mathematics Department Newsletter

VOL. 1
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Dear Members of the Mathematics Department,

This is the first monthly newsletter for our active department! We wanted to have a means of conveying information, happenings, accomplishments, and other news with all of you on a regular basis. As this is a prototype, we are interested in your feedback and help with what would be interesting and beneficial to include on a monthly basis. Let's start with something fun: What should we call this publication? Please submit your responses and suggestions via email to math-events@umich.edu. A winner will be chosen from all entries. This newsletter is our way of keeping in touch and letting you know of happenings within the department. Please share your stories, too!

SAVE the DATE

24th Annual Mathematics Career & Graduate Programs Conference

Friday, November 6, from 1-4PM

More information coming soon!

POSTDOCTORAL FACULTY

This fall, **the department welcomed 35 new postdoctoral faculty.** The cohort includes NSF fellowships:

- Paul Apisa, Geometry/Topology (also named a Donald J. Lewis Research Assistant Professor)
- Martin Bobb, Geometry/Topology
- Robert Laudone, Algebra

Other named postdocs include:

- Tomas Berggren, Analysis, James Van Loo Postdoctoral Fellow
- Alexander Bertoloni Meli, Number Theory, NSF Research Training Grant Fellow
- Jungyi Cao, Actuarial Science, Curtis Huntington Research Assistant Professor
- Prakash Chakraborty, Finance, Byrne Research Assistant Professor
- Patrick Daniels, Number Theory, NSF Research Training Grant Fellow

FACULTY

- [Bhargav Bhatt](#) receives [New Horizons Prize](#)
- [Sarah Koch](#) receives [Harold R. Johnson Diversity Service Award](#)
- [Danny Forger](#) creates [mobile app to address sleep issues due to social distancing](#)
- [Gavin LaRose](#) receives [2020 Distinguished Service Award](#)

As of June 1, 2020, the following faculty members have retired and earned emeritus status:

- [William Fulton](#) (with the department since 1998)
- [Hugh Montgomery](#) (with the department since 1972)
- [Carl Simon](#) (with the department since 1972)
- [John Stembridge](#) (with the department since 1988)

GRADUATE

Applied Mathematics Ph.D. student April Nellis, along with faculty Erhan Bayraktar and Asaf Cohen, has developed mathematical models to help in determining lock-down protocols and effectiveness. Her research garnered much attention across and outside the University. [More.](#)

This year's [Quantitative Master's Program Merit Scholarship winners](#) are **Rui Deng, Yanqing Li, and Hiroyuki Makino!** This scholarship in the amount of \$2,000 is awarded to the top three students in each cohort, based on cumulative GPA in the first academic year. Mr. Deng, Mr. Li, and Mr. Makino each achieved a GPA above 4.0 in the 2019-2020 academic year.

Upcoming Thesis Defense

Name: Amanda Bower

Thesis Title: Dealing with Intransitivity, Non-Convexity, and Algorithmic Bias in Preference Modeling

Date & Time: 10/27/2020 at 2:00p.m.

Advisors: Martin Strauss & Laura Balzano

[Zoom link](#) (Contact math-grad-office@umich.edu to obtain the passcode for defenses.)

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DIVERSITY, EQUITY & INCLUSION

YPSILANTI MATH CORPS

The 2020 session of the [Ypsilanti Math Corps at U\(M\)](#) was a resounding success. The program was a virtual experience for the summer, but that just added another level to the enthusiasm and engagement of the staff and students. Led by Professors Sarah Koch and Stephen DeBacker, along with several other department faculty and students, the program taught 60 middle schoolers and 30 high school teaching assistants for five weeks during July and August. The program was supported by the Department, the National Science Foundation, as well as several generous donors including one donation of 100 new tablets that allowed all of the participants to experience an engaging and fulfilling online program with appropriate technology. A more detailed program description, as well as many comments from participating students, is included in [this document](#). LSA posted a wonderful article about Math Corps [here](#).

This program will continue over the school year with [Super Saturdays](#). Stephen and Sarah hope to maintain contact with the Ypsilanti middle and high school participants every weekend. Please contact Sarah Koch, kochsc@umich.edu if you would like to assist with this fun program.



Graduate student Alex Kapiamba earned a prestigious [Ford Foundation Fellowship](#). Alex started in the MLB Master's program and is currently working with Sarah Koch toward his Ph.D. He is doing ground-breaking work in the field of complex dynamics.

The [Michigan Math and Science Scholars \(MMSS\)](#)

Program is a summer enrichment program, which aims to increase knowledge and foster an interest in math and science among high school students. In July 2020, the program completed its 20th year. The program's schedule was adjusted to accommodate online learning. With the altered format, 346 high school students from around the world participated in one or more of the 21 courses offered, filling 359 seats. Nine academic fields were represented by our course offerings including Mathematics, Physics, Chemistry, Biology, Psychology, Astronomy, Statistics, Anthropology, and Data Science.



UPCOMING EVENTS

[Colloquium Speakers for the fall semester:](#)

- Alexander Volberg (Michigan State University) Metric properties of Banach spaces, Enflo's problem, Pisier's inequality and quantum random variables
- David Rowe (Mainz University) - Emmy Noether: Mathematician Extraordinaire
- Simon Donaldson (Imperial College London) - TBA
- Erhard Scholz (Universität Wuppertal) - How Hermann Weyl proposed to take up and go beyond Riemann's ideas on manifolds and differential geometry
- Catherine Goldstein (CNRS, Institut de mathématiques de Jussieu Paris Gauche) Hermite's mathematics as natural science
- Norbert Schappacher (Université de Strasbourg) - TBA
- Tatiana Toro (University of Washington) - TBA

RESEARCH

It is grant proposal time. Several faculty are submitting proposals so let's hope there is success.

STAFF

Anne Speigle, one of our student services staff, recently took a new position as the Graduate Program Coordinator in Civil and Environmental Engineering. Engineering is lucky to have such a great staff person!

On October 26, Madeline Inglis will be joining us as Undergraduate Assistant in the Student Services Office. Madeline, who has spent two years in the Sociology Department, will be replacing Kelsi Archibald, who moved to the Grad/Undergrad Assistant role left by Anne. Congratulations!