NEWSLETTER

Howard University Math Department

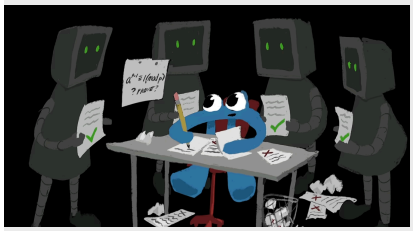
The Future of Graduate Education

From Dennis Davnport

Ken Ono, Ravi Vakil and others discuss the future for Graduate Students in Mathematics in the age of AI.

Nov 11, 3pm ET

Zoom registration



Is this a good time to be a mathematician?

Grant Sanderson, creator of the 3Blue1Brown youtube channel, argues that it is, even if LLMs get to be better at proving theorems than mathematicians, among other things.

Video



Nandi Leslie, Trustee,
Inaugural Blackwell Lecture

From Bourama Toni

On **Tuesday Nov 17,** Nandi Leslie, distinguished alumna of our department and recently appointed Trustee of Howard University, will deliver the inaugural lecture of the David Blackwell distinguished lecture series. The lecture will be part of **Blackwell Day 2026: Foundations to Frontiers**, a full day celebration of our mathematical heritage, our faculty and students, and the expanding frontiers of mathematics, data science, and artificial intelligence. There will be undergraduate and graduate student research posters, flash presentations, faculty research highlights and other events. The lecture will be the centerpiece of the afternoon program, from 1:00 to 4:00 PM.

More Announcements

AMS report on Graduate Education

From Talitha Washington

Report arising from Committee on Education convened by AMS to study the changing landscape of mathematics doctorate education.

Report

Simons Foundation Launches $15 million effort to help Mathematicians

From Sam Hopkins

The Simons Foundation announced a new set of initiatives that will help the mathematics community navigate the rapid rise of artificial intelligence in the field.

Announcement



Moussa Doumbia

Messy Data Library

Teaching Resource for Data Science and AI

From Moussa Doumbia

I'm pleased to share a new teaching resource that is now available for our students: the **Messy Data Library**, a free collection of practice datasets and hands-on projects designed to support data science, statistics, data wrangling, data engineering, machine learning, and capstone courses. Explore the library here: Messy Data Library

The development of this resource was supported by the **Amazon Teaching Fellowship Grant (2026-2027)**. Through this grant, I was able to design and build a collection of realistic datasets and instructional materials that provide students with practical experience working with messy, real-world data.

Past newsletters can now be reached via the department website.
[Click on "About" and then "News and Events"].

Newsletter is sent out when there is something new.
It is produced without the use of AI.

Ongoing Seminars in the department

Mondays

Algebra and Combinatorics Seminar

Combinatorics & Algebra Seminar which had been running for a number of years at George Washington University will now be a joint venture between the GW and Howard math departments. The organizers of the seminar are Joel Lewis & Robert Won (GW) and Sam Hopkins & Minh-Tam Trinh (Howard). The talks will take place 4-5pm on Mondays, in Rome Hall 459 at GWU.

Seminar Website

Special seminar in Mathematical Biology

Jean M-S Lubuma (University of the Witwatersrand, Johannesburg, South Africa) will give an in person Mathematical Biology talk this Monday, October 26, from 4:10 to 5pm in room 109 of ASB-B.

Pizza and light refreshments will be served.

Title: Modeling the Transmission Dynamics of Mpox for Susceptible Individuals with or without HIV

Ongoing Seminars in the department

Tuesdays

Topological Semigroups and Ramsey Theory

10:10 - 11 am on Zoom (contact organizer for link)

On Oct 17, Dennis Davenport will speak on "Forbidden Finite Intersections of Measurable Sets."

Organizer: Dennis Davenport

Mathematical Biology and Data Driven Insights

11 am in room 205, Graduate School Building

On Oct 6, Maeve Wildes, who recently joined our department, talked about "Porous medium equation tumor growth models."

Organizers: Katie Gurski, Joon Ha, Sayomi Kamimoto, Yeona Kang, Chris Kim

AI, combinatorics, and number theory seminar

Alternate Tuesdays 2 to 3pm. Contact organizer for zoom link.

On Oct 27, Katherine Stange of University of Colorado, Boulder will speak about Illustrating Mathematics (with AI).

On Oct 13, Seewoo Lee of EPFL gave some tips on digesting AI proofs.

Organized by Angelica Babei as part of her NSF grant.

Seminar website

Ongoing Seminars in the department

Thursdays

Number Theory Seminar

Seminars are on Thursdays, 3.15 to 4.15pm. Contact organizers for zoom link.

Krystal Maughan (University of Vermont/ Cyprus Institute) talked about "Isogeny-Based Cryptography for a World with Quantum Computers" on Oct 22.

Organizers: Angelica Babei and Sankar Sitaraman

Seminar website

Fridays

Friday Chill Math (problem session)

Jermaine McDermott is organizing informal problem sessions for students interested in exams such as the Putnam exam.

Fridays 1.30 to 3 pm, room 203.

Graduate Students Seminar

Seminar meets fridays 2.30 to 3.30pm.

Contact person: Toni Smith

Friday Colloquium Series

Fridays, 4.10 to 5pm. Room 109



On friday, Oct 30 , **Noah Charles** of Reed College will speak. He works on Condensed Matter Theory



On Oct 23, **John Wierman** of Johns Hopkins University of Louisiana spoke about "Rigorous Bounds for Bond Percolation Thresholds of Archimedean Lattices"



On Oct 16, **Kyndra Middleton** (Interim Senior Associate Dean for Academic Affairs, School of Education, HU) spoke about "Are Students Learning What We Think We are Teaching?"

The colloquium schedule and past videos are available at this website: https://deleo.website/HU/colloquium.html

Organizers: Alex Burstein, Roberto De Leo, Sam Hopkins, Cheikh Ndiaye

Talks And Workshops Elsewhere

Arizona Winter School

(via Daniel Mamo)

Application/registration is **required for attending**.

- **Students** should apply here. The application deadline for **students** is **November 24th, 2026**.
- **Senior participants** (postdocs, faculty, and anyone with a PhD) should register here. The application/registration deadline for **senior participants** is **December 15th, 2026**.



New Horizons in the Calculus of Variations and Its Applications

(via Dennis Davenport)

Carnegie Mellon University

May 24–28, 2027 **Event website**

AMS Day, Monday, November 30, 2026

Celebration of all the reasons to love mathematics: For AMS Day, AMS members will enjoy special offers such as 50% off selected book, Register for the 2027 JMM on and be entered into a raffle for 3 free JMM 2027 registrations!

PDE Day Conference

Virginia Commonwealth University, Richmond, on Sat Nov 14.

Graduate students and Postdocs are encouraged to present talks and posters.

Free Registration (required)

The Oxford AI Symposium

Artificial Intelligence, Knowledge & the Human Future

5 - 7 July 2027 | Oxford, England

Website

Talks And Workshops Elsewhere

2026 SIAM-DC-MD-VA Section Meeting

(via Dennis Davenport)
November 20, 2026

George Mason University, Arlington Campus
Registration is free but required. Registration deadline is October 31, 2026

math.gmu.edu/~hantil/SIAM/Fall2026

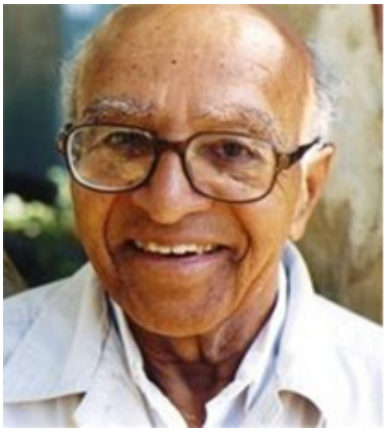
Blackwell-Tapia Conference

(via Dennis Davenport)

Rice University

Dec 4-5, 2026 **Event website**

Deadline Nov 1 for registration





In previous newsletters

Conference on Constructive Mathematics

Conference on Formal Power Series

Mid-atlantic Algebra, Geometry and Combinatorics (MAAGC) workshop

Scholarship and Fellowship Opportunities

From various sources

LA's Best @ USC

From Dennis Davenport

The Los Angeles Biostatistics and Data Science Summer Training Program at USC helps students to learn about biostatistics. The program covers the cost for each trainee to travel to Los Angeles, room and board, and earn two academic credits from USC.

More Information

Department of Homeland Security (DHS) Programs

Programs for summer 2027 as well as longer periods for students to work with DHS scientists on DHS research.

Summer 27 program

Deadline Dec 2

Graduate Research Fellowship

12 month fellowship with $90,000 stipend.

Deadline Nov 13.



From Dennis Davenport

EDGE Foundation 2027 Summer Program

The 2027 EDGE Summer Program will be held during June 13-July 10, 2027 at the University of Minnesota Twin Cities (pending funding). The EDGE Foundation and the University of Minnesota Twin Cities will cover all travel, room, and board expenses related to the Summer Program. Program participants will also receive a modest stipend.
This is a four-week, residential session designed to prepare a cohort of women and gender-nonconforming individuals to thrive in their PhD programs in the mathematical sciences. Program participants attend daily lectures in subjects such as linear algebra, real analysis, measure theory, and applied mathematics.
More Information

Interesting articles and comments

Podcast: Conversation on Math and AI with Vakil, Venkatesh, ...

From louise Raphael

YouTube link to a Podcast that may be of interest to HU math department with Ravi Vakil, Akshay Venkatesh, and Alex Kontorovich hosted by Levin and Strogatz.

Title: What is Math For in the age of AI ?

Youtube video

Proofs and Prompts

A communal blog for mathematicians' thoughts on how AI is changing mathematics
Sample posts: Could AI help correct the mathematical literature?

AI and Mathematics: Public Good, Credit, and Education

Website