

UNDERGRADUATE MATH SEMINAR

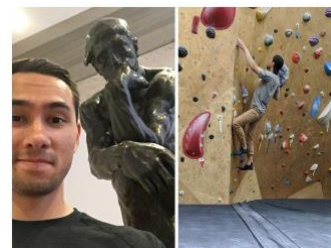
Welcome back, and Happy New Year!

The first seminar of the winter term will be

DATE: THURSDAY, January 12

Time & 12:30 – Refreshments in **Bailey 204**

Location: 12:50 – 1:45 Seminar in **Bailey 207**



Zack Porat '20

In this seminar, recent Union College graduate, **Zachary Porat '20**, who is currently a math PhD student at **Wesleyan University** will deliver the following talk:

Title: The Search for Large Prime Numbers

Abstract: Large prime numbers are essential to our security in the modern age. Used throughout cryptography, large primes allow for secure, encrypted communication. But how exactly do we find these monster primes? In this talk, we investigate the history of searching for large prime numbers. Starting in the period of computation by hand and progressing through the age of computer verification, we will detail how techniques have evolved over time.

Math Department Well Represented at Joint Mathematics Meeting in Boston

Every winter, the American Mathematical Society (AMS), in collaboration with over 15 other major mathematical organizations, host the annual Joint Mathematics Meeting (JMM). The JMM is touted as *the largest mathematics gathering in the world!* This year's meeting was held this past week in Boston, January 4 – January 7. Several math professors from Union gave talks or organized sessions of talks at the meetings, including

- **Professor Ellen Gasparovic** gave *two* talks, “Distances Between Immersed Graphs: Metric Properties,” and “A Medial Axis-Based Compactness Measure vs. the Eye Test for Detecting Gerrymandering.”
- **Professor Jeff Hatley** presented “ λ -invariant Stability in Families of Modular Galois Representations.”
- **Professor Jeff Jauregui** presented “Optimizing Capacity with Nonnegative Scalar Curvature.”
- **Professor Leila Khatami** organized the AMS Special Session on The Combinatorics of Geometry of Jordan Type and Lefschetz Properties.
- **Professor Phaniel Mariano** presented also presented *two* talks, “Improved Upper Bounds for the Hot Spots Constant of Lipschitz Domains,” and “Spectral Bounds for Exit Times on Metric Measure Spaces and Various Applications.”

A Fun Mathematical Treat for the New Year:

A fly is in the corner on the floor of an auditorium with dimensions 1518cm x 934cm x 957cm. It then flies directly to the opposite corner on the ceiling. How far did it fly?

Calculus Help Center
Sunday-Thursday, 7:30-10:00pm, Sorum House Seminar Room