Conference Schedule (November 9, 2024)

The registration and all the talks will be in the 7800 York Road Building (**YR**) on the second floor. There is a parking garage adjacent to the building (the Glen Garage) connected to the third floor by a walking bridge. Parking is free on weekends. If you have registered online, you will find a printed nametag at the registration table. If you have not registered online, please visit the registration table and sign in. Please be sure to stay for the Prize Session at the end of the conference; there will be a raffle for all student participants with several prizes.

9:30 – 10:00   Registration   YR, 2nd floor lobby

10:00 – 10:05   Opening remarks by the Department Chair   YR 205

10:05 – 11:05   Morning plenary address   YR 205
Inverse Problems for Differential Equations: How to "See" an Underground Tectonic Fault
Dr. Anna Mazzucato, Pennsylvania State University

11:10–11:30   Student talks
Using Integer Covering Systems to Find Riesel and Sierpiński Numbers   YR 217
Chris Bispels, University of Maryland, Baltimore County
Twists, Turns, and Topology: Exploring the Fascinating World of Liquid Crystals   YR 219
Mateusz Ratman, Johns Hopkins University

11:35-11:55   Student talks
Graph Coloring with Restricted Colors   YR 217
Alejandro Escorcia, Loyola University Maryland
Applying Deep Learning to Simulate Clark-Alpha Turbulence Model   YR 219
Chenyue Qi, Towson University

12:00-12:20   Student talks
Vertex Minimal Graphs with Automorphism Groups of Order pq   YR 217
Alex Holtzman, Towson University
Topological Quantum Field Theories over Algebraic Field Extensions   YR 219
Fabian Espinoza, Johns Hopkins University

12:20–1:20   Plenary session   YR 205
Mathematics Careers in Government, Industry, and Academia

1:20–2:15   Lunch   YR, 2nd floor lobby

2:15–3:15   Afternoon plenary address   YR 205
Where Parallel Lines Meet: Take a Ride to Infinity on the Projective Plane
Dr. Ed Scheinerman, Johns Hopkins University

3:25–3:45   Student talks
On Algebraically Defined Edge Colored Graphs   YR 217
Susanne Goldstein, Oberlin College
Inverse Iteration for Laplace Eigenvalue Problems   YR 219
Ephraim Ruttenberg, University of Maryland, Baltimore County

3:50-4:10   Snacks and professional networking   YR, 2nd floor lobby

4:15–4:35   Student talks

Mordell's Theorem and Further Developments   YR 217

Yeju Shin, University of Massachusetts at Amherst

A Theoretical Approach to Medical Micro-Robots   YR 219

Alex Holtzman, Towson University

4:40–5:00   Student talks

Almost Primes of Almost Prime Index   YR 217

Megan Triplett, Dickinson College

Underrepresentation in the US House of Representatives: Finding the Probability
of Quota Violations in Congressional Apportionment   YR 219

Tyler Wunder, Johns Hopkins University

5:05–5:25   Student talks

Spectral Methods in Graph Theory and Finite Topological Spaces   YR 217

Nicolas Rugo, Johns Hopkins University

Developing an Automation Tool to Solve a Logistical Problem Using AMPL and Python   YR 219

Hai-Hsin Huang, Virginia Military Institute

5:30–5:45   Prize session   YR 205