## Schedule for the Spring 2025 MAA MD-DC-VA Section Meeting at George Mason University

Parking is in Lot A both days. Most events Friday are in the Bistro, at the bottom of Johnson Center (#30 on the map). The "South Plaza" is the easiest entrance since it is right near the rooms. Saturday events are in Enterpise Hall (#17 on the map). Registration will still be in the Johnson Center Bistro.

## Friday, April 11

Worksho

worksnop	4:00-6:00	JC Cinema
Integrating 3D Printing into Mathematics Classroom: A Hands-On Workshop Rebin Muhammad (on behalf of MAA MD-DC-VA COMMIT) Montgomery College		
Registration	6:00-7:00	JC Bistro
Reception	6:00-7:00	JC Bistro
Welcome	7:00	JC Bistro
Banquet	7:00-8:00	JC Bistro
Banquet Talk	8:00-9:00	JC Bistro
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We Integrate Differentials, Not Functions

Eugene Boman & Robert Rogers

Pennsylvania State University, Harrisburg & SUNY Fredonia

## Saturday, April 12

Registration	8:00-12:00	JC Bistro
Breakfast	8:00-9:00	JC Bistro
Coffee/Tea/Water	8:00-12:00	JC Bistro
MAA Book Sale	8:30-3:30	Enterprise Lobby
Contributed Talk Session 1	8:20-8:40	
Pre- and Post-COVID Relationships between Crime and Travel Patterns in Baltimore City (student talk) Jay Calkins Towson University	8:20-8:40	Enterprise 173
Obsidian for Educators Pallavi Bhale Montgomery College	8:20-8:40	Enterprise 174
Modeling Acoustic Loads on Rockets at Takeoff (student talk) Joseph Samson Ungerleider, Valentina Paz Soldan Viscarra James Madison University	8:20-8:40	Enterprise 274
A Cutthrought Game of Red-Blue Cherries Hannah Marron St. Mary's College of Maryland	8:20-8:40	Enterprise 275
Introduction to Mathematics Applications: Optimization and Mathematical Modeling (student talk) Chloe Garnish St. Mary's College of Maryland	8:20-8:40	Enterprise 276
Hamilton and the Quaternions: A Case Study in Mathematical Creativity Jeff Suzuki Brooklyn College CUNY	8:20-8:40	Enterprise 277
Contributed Talk Session 2	8:45-9:05	
Modeling Crime on Baltimore City Road Network (student talk) Natalie Brownlowe, Jeffrey Bowerman Towson University	8:45-9:05	Enterprise 173
Designing Web-based Mathematical Games to Enhance Understanding and Enjoyment Mona Hajghassem, Rebin Muhammad, Camilo Diaz Montgomery College	8:45-9:05	Enterprise 174

Immune cell dynamics during a flu infection (student talk) Hai-Hsin Huang Virginia Military Institute	8:45-9:05	Enterprise 274
Some Properties of Currie's Curious Function Dan Kalman American University (ret)	8:45-9:05	Enterprise 275
A Radial Basis Function - Finite Difference Approach for Inverse Heat Conductivity Problems Nadun Kulasekera Mudiyanselage Mount St Mary's University	8:45-9:05	Enterprise 276
Flood Warning! What Combinatorics and Algebra Tell us About Graphs (student talk) Jackson Wills, Trey Wilhoit Roanoke College	8:45-9:05	Enterprise 277
Contributed Talk Session 3	9:10-9:30	
Utilizing Kernel Density Estimations and Principal Component Analysis to analyze crime, population, and travel patterns. (student talk) Alex Holtzman Towson University	9:10-9:30	Enterprise 173
Precalculus Teaching Squares Deepa Ramakrishnan, Frederick Community College Spencer Hamblen, McDaniel College	9:10-9:30	Enterprise 174
A Quantitative Schlieren Image Investigation of the Coanda Flare Jet Boundary (student talk) Josiah Walker James Madison University	9:10-9:30	Enterprise 274
The space of shape of rank 3 unit lattices in certain number fields Sara Chari St. Mary's College of Maryland	9:10-9:30	Enterprise 275
MINIMUM QUANTUM DEGREES WITH MAYA DIA-GRAMS Ryan Shifler Salisbury University	9:10-9:30	Enterprise 276
On the Quantum Parameter in the Quantum Cohomology of a Family of Odd Symplectic Partial Flag Varieties (student talk) Caleb Shank Salisbury University	9:10-9:30	Enterprise 277

Welcome	9:45	Enterprise 178
Invited Address	9:45-10:45	Enterprise 178
Beading and Folding and Sewing, Oh My! An Adventure in the Map Coloring Eve Torrence Randolph Macon College	e Marvelous I	Land of
Meeting of the General Membership	11:00- 12:00	Enterprise 178
Radical Dash	11:00- 12:00	Enterprise Lobby
Lunch	12:00-1:00	Enterprise Lobby
Section Representative Drop-In Session (Maggie Rahmoeller)	12:00-1:00	Enterprise Lobby
Jeopardy	1:05-2:05	Enterprise 178
Teaching Exchange	1:05-2:05	Enterprise Lobby
Welcome	2:15	Enterprise 178
Invited Address	2:15-3:15	Enterprise 178
Fishes Go MOO: investigating an interesting convergence in fish by math modeling Nicholas Battista The College of New Jersey	iomechanics	through
Refreshments	3:20-3:30	Enterprise Lobby
Undergraduate Poster Session	3:30-4:15	Enterprise Lobby
Contributed Talk Session 4	3:30-3:50	
Crime Intensity in Baltimore City: Calculating, Graphing, and Re- lating to Travel Patterns (student talk) Timothy DeLloyd Towson University	3:30-3:50	Enterprise 173
Innovative Use of Technology in Textbooks: Case in Point - ODEs Stephen Saperstone, GMU Max Saperstone, Steampunk Inc.	3:30-3:50	Enterprise 174

Enterprise 274

3:30-3:50

Data and Statistics in Basketball (student talk)

Gabby Krystofiak Shenandoah University

Directed tilings of the Euclidean and hyperbolic plane Brandon Shapiro University of Virginia	3:30-3:50	Enterprise 275
5 Levels of Machine Learning Examples for Layfolk through Linear Algebraists Katherine Socha Northeastern University Arlington	3:30-3:50	Enterprise 276
Orders of Quaternion Algebras and their Properties (student talk) Henry Pratt St. Mary's College of Maryland	3:30-3:50	Enterprise 277
Contributed Talk Session 5	3:55-4:15	
MCMC diagnostics presented in interactive Quarto slides Deepak Bastola Salisbury University	3:55-4:15	Enterprise 173
Mathemalchemy: Student Experiences at the National Academy of Sciences Alice Petillo Marymount University	3:55-4:15	Enterprise 174
Air Force's Combat Logistics: Responding to Threats in the Pacific Theater (student talk) Ben Bierstine Virginia Military Institute	3:55-4:15	Enterprise 274
Lattices in Type B (student talk) Stephen Barr Salisbury University	3:55-4:15	Enterprise 275
Limit Properties of Averages of nth Iterates Kubilay Dagtoros, Sujan Pant Norfolk State University	3:55-4:15	Enterprise 276
Quantum Combinatorial Game Extensions (student talk) William Lambert St. Mary's College of Maryland	3:55-4:15	Enterprise 277

Contributed Talk Session 6	4:20-4:40	
Parameter Estimation with Dense, Convolutional, and Autoencoder Neural Networks Applied to the FitzHugh-Nagumo ODE (student talk) Aidan Chadha Virginia Tech	4:20-4:40	Enterprise 173
Playing Minecraft like a Mathematician! Michael Weselcouch Roanoke College	4:20-4:40	Enterprise 174
Application of Hof's Dynamic Stability Model Through the Lens of a Countermovement Push-Up Trial: Derivation and Prelim- inary Results (student talk) Rebecca Go Stevenson University	4:20-4:40	Enterprise 274
Symmetry in graphs: bicoset digraphs Rachel Barber Hood College	4:20-4:40	Enterprise 275
Dual Necessary Conditions for Minima of Nonsmooth Scalar Optimization Problems with Inequality Constraints Elena Constantin University of Pittsburgh at Johnstown	4:20-4:40	Enterprise 276
Stitching pants with stripes: Generating nested cobordisms Shruthi Sridhar Shapiro University of Richmond	4:20-4:40	Enterprise 277
Student Awards Ceremony	4:50-5:00	Enterprise 178