Schedule for Spring 2024 MAA MD-DC-VA Section Meeting

Friday Parking is at the Mason Street Parking Deck, Levels 3-5 Only, at 715 S Mason St. Harrisonburg, VA. The Friday workshop will be in Taylor Hall (The Union), and the reception will be in D-Hall. If you have a Handicap Parking Permit, you can park in Lot A next to D-Hall.

Saturday Parking is in lots D2 (900 Carrier Dr), D1 (2000 Alumni Drive), and C10 (1151 Carrier Dr) Lots. All Saturday events will be in EnGeo (Engineering/GeoSciences). Enter through the Physics and Chemistry building right next to EnGeo to get to the conference location. The two buildings are connected. There will be MAA signs to help you get to the conference location.

Friday, April 26

Section NExT

Hortensia Soto

Colorado State University

Section NEXT		1ay101 200
Workshop	4:00-6:00	Taylor 306
Promoting community, confidence, and creativity in the classroom Heather Russell (on behalf of MAA MD-DC-VA COMMIT) University of Richmond		
Registration	6:00-7:00	D-Hall, 3rd Floor, Hall of Presidents
Reception	6:00-7:00	D-Hall, 3rd Floor, Hall of Presidents
Welcome (Sam Prins, Dean of College of Science and Mathematics)	7:00	D-Hall, 3rd Floor, Hall of Presidents
Banquet	7:00-8:00	D-Hall, 3rd Floor, Hall of Presidents
Banquet Talk	8:00-9:00	D-Hall, 3rd Floor, Hall of Presidents
Compassion in & Access to Learning Mathematics (CALM)		

Taylor 206

Saturday, April 27

Section NExT		EnGeo 1210
Registration	8:00-noon	EnGeo 2nd Floor Hallway near EnGeo 2301
Breakfast	8:00-9:00	EnGeo 2nd floor hallway
MAA Book Sale	8:00-3:30	EnGeo 2nd Floor Hallway near EnGeo 2301
Contributed Paper Session 1	8:20-8:40	
First and Second-Order Necessary Conditions for Nonsmooth Set-Constrained Scalar Minimization Problems Elena Constantin University of Pittsburgh at Johnstown	8:20-8:40	EnGeo 1202
Digital Image Processing in College Mathematics Eugene Galperin East Stroudsburg University	8:20-8:40	EnGeo 1204
A sampling of inquiry opportunities in a complex-themed transition to advanced mathematics course Bob Sachs George Mason University	8:20-8:40	EnGeo 1207
Introduction to Large Scale Geometry Kevin Sinclair Shenandoah University	8:20-8:40	EnGeo 1208
How the Legalization of Marijuana Affects Alcoholism: A Mathematical Approach for Co-abuse Ana Vivas, James Tipton, Sujan Pant Norfolk State University	8:20-8:40	EnGeo 1209
Mobility and Crime in Baltimore City (student talk) Natalie Brownlowe Towson University	8:20-8:40	EnGeo 2208
Automorphic Forms, Elliptic Curves, and Galois Representa- tions (student talk) Henry Pratt St. Mary's College of Maryland	8:20-8:40	EnGeo 2210

Contributed Paper Session 2	8:45-9:05	
Explaining the Math of Queer Relationship Dynamics Edison Hauptman University of Pittsburgh	8:45-9:05	EnGeo 1202
Middle School Math Modeling Outreach Greg Hartman, Meagan Herald, Karen Bliss Virginia Military Institute	8:45-9:05	EnGeo 1204
Multivariable Calculus with CalcPlot3D David Clark Randolph-Macon College	8:45-9:05	EnGeo 1207
Concordance of knots in 3-dimensional manifolds Ryan Stees University of Virginia	8:45-9:05	EnGeo 1208
Finitely Additive Measures in Number Theory Charles Samuels Christopher Newport University	8:45-9:05	EnGeo 1209
Data Into Action: Adventures in Data Science Consulting (student talk) Shelby Hendrickson, Kailey Johnson, Elizabeth Porter Hood College	8:45-9:05	EnGeo 2208
Exploring Probabilities in Bingo and its Variations (student talk) Matt Gunn Randolph-Macon College	8:45-9:05	EnGeo 2209
Elliptic Curve Cryptography (student talk) Thomas Karnell St. Mary's College of Maryland	8:45-9:05	EnGeo 2210
Contributed Paper Session 3	9:10-9:30	
A Tribute to Mathematician Evelyn Boyd Granville: 1924-2023 Bonita Saunders National Institute of Standards and Technology (NIST)	9:10-9:30	EnGeo 1202
Utilizing a Mastery-Based Grading Method in a Foundational Math Class Amy Tucker Stevenson University	9:10-9:30	EnGeo 1204

Using Gateway Tests to Assess Computational Skills in Linear Algebra Katie Quertermous James Madison University	9:10-9:30	EnGeo 1207
Hilbertian Neutral Geometry without the SAS Axiom Elizabeth Brown James Madison University	9:10-9:30	EnGeo 1208
Understanding the Obesity Epidemic: A Mathematical Model for the Dynamics between Insulin and Glucose. Sujan Pant, James Tipton, Suresh Subedi, Kubilay Dagtoros, Ana Vivas Norfolk State University	9:10-9:30	EnGeo 1209
Further Improvements to the Upper Bound for the Site Percolation Threshold of the Square Lattice (student talk) Samuel Oberly Johns Hopkins University	9:10-9:30	EnGeo 2208
Analyzing Momentum in Tennis (student talk) Luis Urias Miranda Shenandoah University	9:10-9:30	EnGeo 2209
Elliptic Curves over Finite Fields of Characteristic Two (student talk) Lauren Cooney, Chloe Garnish St. Mary's College of Maryland	9:10-9:30	EnGeo 2210
Welcome (Anthony Tongen, Vice President of Research, Economic Development, and Innovation, Chief Research Officer)	9:45	EnGeo 2301
Invited address	9:45-10:50	EnGeo 2301
Ada Lovelace: The Making of a Computer Scientist Adrian Rice Randolph Macon College		
Meeting of the General membership	11:00- 12:00	EnGeo 2301
Radical Dash	11:00- 12:00	King Hall 0259- nTelos room (King Hall and EnGeo are connected.)

Lunch

EnGeo 2nd floor hall-

way and King Hall

259

12:00-1:00

Jeopardy	1:05-2:05	EnGeo 2301
Welcome (Ravi Shankar, Department Head of Mathematics and Statistics)	2:15	EnGeo 2301
Invited address	2:15-3:15	EnGeo 2301

A Neural Network Approximation of the Proximal Operator of the L-infinity Norm Kathryn Linehan University of Virginia

Undergraduate Poster Session	3:30-4:15	EnGeo 2nd floor hallway
Contributed Paper Session 4	3:30-3:50	
Using Single-Elimination Tournaments as a Voting Method Chris Hellings University of Virginia	3:30-3:50	EnGeo 1202
Specifications Grading in a Liberal Arts Math Class Melanie B Butler Mount St. Mary's University	3:30-3:50	EnGeo 1204
Rethinking Precalculus Spencer Hamblen McDaniel College	3:30-3:50	EnGeo 1207
The Power Series No One Tells you About, with Special Guest Star: The Fibonacci Sequence Mike O'Leary, Jay Zimmerman, Liz Goode Towson University	3:30-3:50	EnGeo 1208
Wallpaper Groups in Origami Structures Sara Chari St. Mary's College of Maryland	3:30-3:50	EnGeo 1209
The Connections Between Consistent Maps and Measures (student talk) Lucas Aberg Christopher Newport University	3:30-3:50	EnGeo 2209
Enhancing Grant Efficiency: Innovations in Database Management at SMCM (student talk) Shameer Rao St. Mary's College of Maryland	3:30-3:50	EnGeo 2210

Contributed Paper Session 5	3:55-4:15	
The Minton Invitational: Community Building and Sports Analytics Michael Weselcouch Roanoke College	3:55-4:15	EnGeo 1202
IBL and DEI in Intro Stats Kelly Bubp Frostburg State University	3:55-4:15	EnGeo 1204
A geometric approach to deriving trig function calculus with (and better for) students Paul Warne, Debra Warne James Madison University	3:55-4:15	EnGeo 1207
Irrational Bases for Natural Numbers Stephen Lucas James Madison University	3:55-4:15	EnGeo 1208
Detecting AI-generated writings (student talk) Abigail Basener Virginia Military Institute	3:55-4:15	EnGeo 2209
Building & Exploring A Scalable Graph Network (student talk) Kiara Alexander, Erin Bozman, Emily Waters, Paola Mareno, Vicki, Poku, Eldana Teklemariam, Andrew Chow James Madison University	3:55-4:15	EnGeo 2210
Contributed Paper Session 6	4:20-4:40	
Preliminary Report on Counterattack Data in Women's NCAA D-1 Volleyball Caleb Adams Radford University	4:20-4:40	EnGeo 1202
Buffon's Needle and How the Ants Went Marching Home Ray Cheng Old Dominion University	4:20-4:40	EnGeo 1204
AI-Driven Gamification of Math Concepts Rebin Muhammad Montgomery College	4:20-4:40	EnGeo 1207
Mathematical Modeling of Natural Killer Cells (student talk) Haihsin Huang Virginia Military Institute	4:20-4:40	EnGeo 2209

Predicting Planned Pooling Patterns (student talk) Josh Makela, Kae Birch, Diego Gonzalez, Claire Jones, Lauren Wiermanski James Madison University	4:20-4:40	EnGeo 2210
Student Awards Ceremony	4:50-5:00	EnGeo 2301