

Mathematical Association of America
 MD-DC-VA Section, April 13-14, 2018
 Washington & Lee University and Virginia Military Institute
 Lexington, Virginia

Schedule of Speakers

Friday, April 13

Time	Location	Event
2:30 – 3:50	324 W&L Huntley	Section Officers Meeting
4:00 – 6:00	327 W&L Huntley	Workshop: <i>Inquiry Based Learning: Math and Beyond</i> Michael Starbird University of Texas at Austin
6:00 – 7:00	Main Lobby VMI Marshall Hall	Registration
6:00 – 7:00	Hall of Valor VMI Marshall Hall	Reception
7:00 – 8:00	Hall of Valor VMI Marshall Hall	Welcoming Remarks Marcia B. France Associate Provost and John T. Herwick, M.D. Professor of Chemistry Washington and Lee University Banquet Dinner
8:00 – 9:00	Hall of Valor VMI Marshall Hall	Banquet Address: <i>Why Mathematicians Can't Write</i> Jason Rosenhouse James Madison University

Schedule of Speakers

Saturday, April 14

All Saturday events will be held at VMI.

Saturday morning activities for Section NExT will be held in Alleghany in Marshall Hall, Center for Leadership and Ethics.

Time	Location	Event
8:00 – noon	Entrance Way Maury-Brooke Hall	Registration
8:00 – 9:00	Entrance Way Maury-Brooke Hall	Coffee / Tea / Water
8:00 – 3:30	Entrance Way Maury-Brooke Hall	MAA Book Sale
8:10 – 8:30		Contributed Papers, Session 1
	119 Mallory Hall	John Kent, Shenandoah University <i>Using the Coupon Collector's Problem to Analyze Randomized Bundling in Magic: the Gathering</i>
	212 Mallory Hall	Frank Barnet, Frostburg State University <i>The Construction and Use of Anaglyphs in the Teaching of Multivariable Calculus</i>
	213 Mallory Hall	David Carothers, James Madison University <i>Mathematics Teacher Preparation in the New CUPM Curriculum Guide</i>
	412 Mallory Hall	Neal Bushaw, Virginia Commonwealth University <i>Bootstrap Percolation on Polygon Tilings of the Plane</i>
	413 Mallory Hall	M. Leigh Lunsford, Longwood University <i>Transitioning from the Finite to the Infinite in the Hilbert Space l^2</i>
	414 Mallory Hall	Joseph Anderson, Salisbury University <i>Convex Geometry in Algorithms for Heavy-Tailed Statistics</i>
8:35 – 8:55		Contributed Papers, Session 2
	119 Mallory Hall	Roland Minton, Roanoke College <i>The Sausage Catastrophe and other Fun Facts</i>
	211 Mallory Hall	Mohammed Talukder, Elizabeth City State University <i>Risk Factors for Having Obesity</i>
	212 Mallory Hall	David Clark, Randolph-Macon University <i>Why I Love Teaching Intro Stats (Now)</i>
	213 Mallory Hall	Special Discussion Session sponsored by the MD-DC-VA IBL Consortium <i>IBL Chat (for Current Users of Inquiry-Based Learning and Related Pedagogies)</i>
	412 Mallory Hall	Caroline Melles, US Naval Academy <i>p-ary Bent Functions and Strongly Regular Latin Square Type Graphs</i>

Schedule of Speakers

	413 Mallory Hall	Joseph Slagel, Virginia Tech <i>Linear Algebra Done Lazily</i>
	414 Mallory Hall	Ming Fang, Norfolk State University <i>A Modified Fixed Point Problem</i>
9:00 – 9:20		Contributed Papers, Session 3
	119 Mallory Hall	Marcus Pendergrass, Hampden-Sydney College <i>A Math and Music PechaKucha</i>
	211 Mallory Hall	Jamee Hood, Muhlenberg College <i>Food Waste at Muhlenberg College</i>
	213 Mallory Hall	Special Discussion Session sponsored by the MD-DC-VA IBL Consortium <i>IBL Activity Swap</i>
	412 Mallory Hall	Ian Miller, St. Mary's College of Maryland <i>A Combinatorial Argument in a Packing Problem</i>
	413 Mallory Hall	Dan Kalman, American University <i>Generalized Fibonacci Numbers Revisited</i>
	414 Mallory Hall	Abdinur Ali, Norfolk State University <i>Machine Learning Algorithms for Malware Detections</i>
9:25 – 9:45		Contributed Papers, Session 4
	119 Mallory Hall	John David, Virginia Military Institute <i>New MAA SPORTS SIGMA</i>
	211 Mallory Hall	Hanna DeMeester, Shenandoah University <i>The Statistical Difference in Coach and Athlete Perceptions of Physical and Mental Demand During a Collegiate Season</i>
	212 Mallory Hall	Kelli Karcher, Virginia Tech <i>Proofreading in Discrete Math: Common Misconceptions vs Serious Logical Fallacies</i>
	213 Mallory Hall	Robert Sachs, George Mason University <i>The i Road to Higher Mathematics: Results from the Current First Implementation</i>
	412 Mallory Hall	Cameron Stopak, James Madison University <i>Divisibility Tests Beyond the Integers</i>
	413 Mallory Hall	Bailey Stewart, University of Mary Washington <i>The Disadvantages of Implementing Symmetric Groups in Zero-Knowledge Protocols</i>
	414 Mallory Hall	Vasily Vasilyev, Shenandoah University <i>Facility Location Problem: Research for Placing an IKEA Warehouse</i>
9:55 – 11:05	Gillis Theater Marshall Hall	Welcoming Remarks Retired U.S. Army Brigadier General Jeffrey G. Smith Jr.'79 Dean of the Faculty and Deputy Superintendent for Academics, VMI Invited Address: <i>Effective Thinking through Mathematics</i> Michael Starbird University of Texas at Austin
11:15–12:15	Gillis Theater Marshall Hall	Meeting of the General Membership
11:15–12:15	Shenandoah Marshall Hall	Radical Dash Teams First Meeting

Schedule of Speakers

12:15 – 1:00	Hall of Valor Marshall Hall	LUNCH
12:15 - 1:00	Blue Ridge Marshall Hall	AWM Luncheon
1:00 – 2:00	135 Mallory Hall	Student Jeopardy Competition
2:00 – 3:00	Entrance Way Maury-Brooke Hall	Coffee / Tea / Water
2:10 – 3:00	400 Level Open Area Maury-Brooke Hall	Student Poster Session See Poster Session Schedule for a List of Presenters
2:10 – 3:25	Shenandoah Marshall Hall	Radical Dash Final Event (20 minutes per team, schedule determined at the first meeting earlier in the day)
2:25 – 2:45		Contributed Papers, Session 5
	119 Mallory Hall	Edwin O’Shea, James Madison University <i>Which Came First: Abraham Lincoln’s Chicken or Euclid’s Egg?</i>
	211 Mallory Hall	Isaac Woods, Christopher Newport University <i>Stochastic Modeling of the IR Spectra of Nitrate Ions in Atmospheric Particles</i>
	212 Mallory Hall	Melanie Butler, Mount St. Mary’s University <i>A Heuristic for Student-Led Mathematical Discussion on an Assigned Reading</i>
	213 Mallory Hall	Special Discussion Session sponsored by the MD-DC-VA IBL Consortium <i>Inquiry-Based Learning Q&A (for those new to IBL, or just curious about it)</i>
	412 Mallory Hall	Charles Samuels, Christopher Newport University <i>Metric Mahler Measures over Number Fields</i>
	413 Mallory Hall	Shannon Haley, University of Mary Washington <i>Non-Commutative Massey-Omura Encryption with Symmetric Groups</i>
	414 Mallory Hall	Nicholas Martin, Shepherd University <i>A New Way to Solve Linear Homogeneous ODE’s with Constant Coefficients</i>
2:50 – 3:10		Contributed Papers, Session 6
	119 Mallory Hall	Rachel Koch, James Madison University <i>Metrics of Gerrymandering: Quantifying Intent</i>
	211 Mallory Hall	Emad Abdurasul, James Madison University <i>Small Sample Confidence Bands for the Survival Function ACL (Abduskhurov, Cheng, and Lin) Estimators</i>
	212 Mallory Hall	Jennifer Erbach, Shenandoah University <i>Is the Relative Use Factor Adaptable as well as Useful?</i>
	213 Mallory Hall	Greg Hartman, Virginia Military Institute <i>Open Source Textbooks & an APEX Calculus Update</i>
	412	Adrian Rice, Randolph-Macon College

Schedule of Speakers

	Mallory Hall	<i>Partnership, Partition, and Proof: The Path to the Hardy-Ramanujan Partition Formula</i>
	413 Mallory Hall	Steven Hetzler, Salisbury University <i>Products of Series: What Can We Know?</i>
	414 Mallory Hall	Andrew Tomassone, James Madison University Brendan Armani, James Madison University <i>An Implementation & Analysis of the Singular Value Decomposition Applied to Image Compression</i>
3:15 – 3:35		Contributed Papers, Session 7
	119 Mallory Hall	Robb Koether, Hampden-Sydney College <i>Iterating the Locker Problem</i>
	211 Mallory Hall	Moa Apagodu, Virginia Commonwealth University <i>Elementary Proof of Congruences Involving Sum of Binomial Coefficients</i>
	212 Mallory Hall	Bonita Saunders, NIST <i>NIST's Digital Library of Mathematical Functions and the Digital Age</i>
	213 Mallory Hall	Mitchel T. Keller, Washington and Lee University <i>PreTeXt: One Input, Many Beautiful Outputs</i>
	412 Mallory Hall	Spirit Karcher, Christopher Newport University <i>Prime Factors and Divisibility of Sums of Powers of Fibonacci Numbers</i>
	413 Mallory Hall	Galamo Monkam, Morgan State University, Bowie State University <i>On Composition of Power Series</i>
	414 Mallory Hall	Ben Rhodes, James Madison University Solving Numerical PDEs: Finite Element Methods and deal.ii
3:45 – 4:40	Gillis Theater Marshall Hall	Invited Address: <i>Epic Math Battles: Counting vs. Matching</i> Jennifer Quinn University of Washington Tacoma
4:45 - 5:00	Gillis Theater Marshall Hall	Undergraduate Prize Session Including Radical Dash