

Mathematical Association of America  
 MD-DC-VA Section, November 7 & 8, 2014  
 Bowie State University – Bowie, Maryland  
 Schedule of Speakers

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Note that “Student Center” refers to the Student Center on the Bowie State campus.

**Friday, November 7**

*Friday activities for Section NExT will be held in Ballrooms B & C of the Student Center.*

<b>Time</b>	<b>Location</b>	<b>Event</b>
<b>2:30 – 3:50</b>	Columbia Rm Student Center	<b>Section Officers Meeting</b>
<b>4:00 – 6:00</b>	Theater Student Center	<b>Workshop:</b> <i>Integrating Tablets into the Mathematics Classroom</i> <b>Gwyneth Whieldon</b> Hood College
<b>6:00 – 7:00</b>	Lobby Student Center	<b>Registration</b>
<b>6:00 – 7:00</b>	Ballrooms B & C Student Center	<b>Reception</b>
<b>7:00 – 8:00</b>	Ballroom A Student Center	<b>Welcoming Remarks</b> <b>Mickey L. Burnim, President</b> Bowie State University <b>Banquet Dinner</b>
<b>8:00 – 9:00</b>	Ballroom A Student Center	<b>Banquet Address:</b> <i>Unsolved: History’s Greatest Ciphers</i> <b>Craig Bauer</b> York College of Pennsylvania

## Schedule of Speakers

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**Saturday, November 8**

*Saturday activities for Section NExT will be held in the Chesapeake Room of the Student Center.*

<b>Time</b>	<b>Location</b>	<b>Event</b>
<b>8:30 – 12:00</b>	Lobby Student Center	<b>Registration</b>
<b>8:30 – 3:30</b>	Lobby Student Center	<b>MAA Book Sale</b>
<b>8:30 – 9:20</b>	Lobby Student Center	<b>Coffee / Tea / Water</b>
<b>8:50 – 9:10</b>		<b>Contributed Papers, Session 1</b>
	Theater Student Center	Randall Cone, Virginia Military Institute <i>The AMC5 Pilot Event: An MAA MD-DC-VA Section Initiative</i>
	Ballroom B Student Center	Ray Cheng, Old Dominion University <i>The Best Mate Search Strategy</i>
	Ballroom C Student Center	Jill Tysse, Hood College <i>Irish Dancing Groups: Some Fun Activities for an Undergraduate-Level Abstract Algebra Course</i>
	Columbia Rm Student Center	Cherng-tiao Perng, Norfolk State University <i>Some observations on Klein quartic, groups, and geometry</i>
	Annapolis Rm Student Center	Hongwei Chen, Christopher Newport University <i>Three Real Variable Proofs of the Euler Reflection Formula</i>
	Ballroom A Student Center	Graduate Student: Harry Lang, Johns Hopkins University <i>A New Proof of the Lovasz Local Lemma</i>
<b>9:15 – 9:35</b>		<b>Contributed Papers, Session 2</b>
	Theater Student Center	Hamid Semiyari, James Madison University <i>An efficient Algorithm for Approximating Solutions of Two-Point Boundary Value Problems and Volterra Integrals</i>
	Ballroom B Student Center	Caroline Melles, United States Naval Academy <i>Undergraduate Capstone Projects in Graph Theory and Other Topics</i>
	Ballroom C Student Center	James Parson, Hood College <i>Constructive Arguments in an Introduction to Proofs Class</i>
	Columbia Rm Student Center	Emmanuel Addo, American University Ben Muirhead, American University <i>Every Vote Counts - Exit Poll Project</i>
	Annapolis Rm Student Center	Undergraduate Student: Sophia Novitzky, Virginia Tech Undergraduate Student: Mahalia Sapp, Virginia Tech <i>Performance Sensitivity in Vertical Geothermal Energy Harvesting Systems</i>
	Ballroom A Student Center	Graduate Student: Lindsey Santos Koos, Old Dominion University <i>Description of a Computationally Efficient Boltzmann Equation Discretization Algorithm and its Application to Broad Spectrum Neutral and Ionized Space Radiation</i>
<b>9:45 – 10:55</b>	Theater Student Center	<b>Welcoming Remarks</b> <b>Weldon Jackson, Provost and Vice President for Academic Affairs</b>

## Schedule of Speakers

		Bowie State University  <b>Invited Address:</b> <i>Computable Mathematics</i> <b>Valentina Harizanov</b> The George Washington University
<b>11:05 – 11:25</b>		<b>Contributed Papers, Session 3</b>
	Ballroom B Student Center	Bud Brown, Virginia Tech <i>Multipliers of Difference Sets and How to Find Them</i>
	Ballroom C Student Center	Donna Dietz, American University <i>Twisty Puzzles for Liberal Arts Math Courses</i>
	Columbia Rm Student Center	James Case, SIAM <i>Efficient Extraction From An Exhaustible Energy Source</i>
	Annapolis Rm Student Center	Undergraduate Student: Katie Sipes, James Madison University <i>Salt Flux Concentration in the Kidneys</i>
	Ballroom A Student Center	Graduate Student: Jasmine Alston, Virginia State University Mohammad Tabanjeh, Virginia State University <i>On The Numerical and Algebraic Techniques for Computing Matrix Determinant</i>
<b>11:30 – 11:50</b>		<b>Contributed Papers, Session 4</b>
	Ballroom B Student Center	Dan Kalman, American University <i>Companion Matrices and Difference Equations 2</i>
	Ballroom C Student Center	Gregory Hartman, Virginia Military Institute <i>Open Textbooks and APEX Calculus: A Final Report</i>
	Columbia Rm Student Center	Roman Sznajder, Bowie State University <i>On Completely Positive Cones</i>
	Annapolis Rm Student Center	Graduate Student: Shantanu Awasthi, Virginia State University Krishan Agrawal, Virginia State University Youngjin Lu, Virginia State University <i>Comparison of Mathematical and Empirical Modelling in Studying the Relationship Between Single Fiber and its Bundle</i>
	Ballroom A Student Center	Graduate Student: Dustin J. Robinson, Virginia State University <i>Self-inversive Group Circle Systems</i>
<b>12:00 – 1:00</b>	Ballroom A Student Center	<b>LUNCH</b>
<b>1:10 – 1:55</b>	Theater Student Center	<b>Meeting of the General Membership</b>
<b>2:05 – 3:05</b>	Theater Student Center	<b>Invited Address:</b> <i>Cannonballs, Triangles, and Secrets: An introduction to elliptic curve cryptography</i>  <b>Larry Washington</b> University of Maryland
<b>3:00 – 4:00</b>	Lobby Student Center	<b>Coffee / Tea / Water</b>
<b>3:15 – 3:35</b>		<b>Contributed Papers, Session 5</b>

## Schedule of Speakers

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	Ballroom B Student Center	Amy Shell-Gellasch, Montgomery College <i>Ancient Indian Verse and the Powers of 2</i>
	Ballroom C Student Center	Bill Abrams, Longwood University <i>Teaching Discrete Mathematics to First Year Majors</i>
	Columbia Rm Student Center	Boyd Coan, Norfolk State University <i>Old Theorems, Alternate Proofs by Exterior Algebra</i>
	Annapolis Rm Student Center	Raymond Fletcher III, Virginia State University <i>Properties of Self-inversive Cubic Curves</i>
	Ballroom A Student Center	Graduate Student: Eugene Evans, Virginia State University <i>Predictive Modeling using Artificial Neural Networks on Polymer Composite Properties</i>
<b>3:40 – 4:00</b>		<b>Contributed Papers, Session 6</b>
	Ballroom B Student Center	Abdinur Ali, Norfolk State University Chung-Chu (George) Hsieh, Norfolk State University <i>Analysis of Antenna Coupling and Magnetic Fields within the Near-Field Region</i>
	Ballroom C Student Center	Bob Sachs, George Mason University <i>Teaching the Fundamental Theorem of Calculus for Better Student Understanding</i>
	Columbia Rm Student Center	Sara Tyler, Hawkes Learning <i>Learning: Anytime, Anywhere</i>
	Annapolis Rm Student Center	Sanju Vaidya, Mercy College Geetha Surendran, Mercy College <i>Applications of Graph Theory to Chemistry</i>
	Ballroom A Student Center	Graduate Student: John Ross, Johns Hopkins University <i>Blowing Bubbles in Gaussian Space</i>
<b>4:05 – 4:25</b>		<b>Contributed Papers, Session 7</b>
	Ballroom B Student Center	Ming Fang, Norfolk State University <i>Issues in Implementing Newton's method</i>
	Ballroom C Student Center	Edwin O'Shea, James Madison University <i>Math for Liberal Arts and the Calculus Pump</i>
	Columbia Rm Student Center	Spencer Hamblen, McDaniel College <i>Jan Term at the Joint Meetings</i>
	Annapolis Rm Student Center	Zheng Tong, Christopher Newport University <i>Equilibrants, Semipositive Matrices, Calculation and Scaling</i>
	Ballroom A Student Center	Graduate Student: Andrew Wills, Virginia Tech <i>A Glimpse at Bijective Combinatorics</i>