8:30-11:45 State Farm Hall of Business 131

8:45 am - 11:45 am Pre-Conference Workshop: An Interactive Tour of Public Key Cryptography (and of Number Theory) Joshua Holden, Rose-Hulman Institute of Technology

12:15 pm -4:45 pm Registration State Farm Hall of Business Atrium

12:50 pm -2:00 pm Introductions and Plenary Talk: Michael Axtell, University of St. Thomas. A Picture's Worth a Thousand Words: Zero-Divisor Graphs and Rings. SFHB 139 - Caterpillar Auditorium

2:15 pm - 3:15 pm Concurrent Sessions

2:15 pm - 3:15 pm Concurrent Sessions			0	
State Farm Hall of Business 131	State Farm Hall of Business 132	State Farm Hall of Business 148	State Farm Hall of Business 149	Start Times
M. Vali Siadat	Dan Hrozencik	Michael Carlyle	Brian Hoffman	2:15 PM
	Undergraduate Research Projects Focusing on the Comparison of Boolean and Continuous Dynamics of Gene Networks	Direct Sums for Graph Automorphisms	Cryptography using Elliptic Curves	
What are the best ways to stimulate		Sandra Tovalin-Schmidt	Maria Radcliffe	2:35 PM
students' intellectual curiosity and affect deep learning? What is the role of modern technology?	Vince Matsko	Vibrational Spectroscopy and Group Theory	A Node-Weighted Model for the Spread of a Non-Indigenous Species	2:45 PM
		Trisha Russo	Enela Aliaj	2:55 PM
	Teaching Mathematics as Art	Reproductive Strategies Compared to a General Model of Fecundity	An Edge-weighted Model for the Spread of a Non-indigenous Species	
3:30 pm-4:30 pm Concurrent Sessions	<u></u>			<u></u>
Jeremy Alm	Ken Clemens	Natalia Poniatowska	Miranda Henderson	3:30 PM
Rigor in College Algebra?!	LEARNING MATHEMATICS AT ILLINOIS STATE NORMAL UNIVERSITY	Security of a Message Authentication Scheme based on Quasigroups	Comparison of Boolean Versus Continuous Dynamics on Three-gene Regulatory Networks	
		Sabrina Allen	Marihan Hegazy	3:50 PM
	Neirda Ellerton	On 2-fold G-designs where G has order at most 4 and edge-multiplicity 2	Comparison of Boolean Versus Continuous Dynamics on Four-gene Regulatory Network	4:00 PM
		Peter Wiese	Benjamin Studer	4:10 PM
	MISCONCEPTIONS ABOUT YOUNG ABRAHAM LINCOLN'S SCHOOL MATHEMATICS ACHIEVEMENTS	Modeling Spiking in Neurons with a Poisson Process	Parametric equations for video games	

4:45 pm - 5: 45 pm Business Meeting

4:45 pm- 6:00 pm Student Contest

6:15 pm Student Pizza Party State Farm Hall of Business Atrium

6:15: Cash Bar Opens Alumi Center 116

6:45 Banquet Alumni Center 116

7:30 Plenary Talk: Joshua Holden, Rose-Hulman Institute of Technology. Braids, Cables, and Cells: An Interesting Intersection of Mathematics, Computer Science, and Art

8:30 am - 11:00 am Registration State Farm Hall of Business Atrium									
8:30 am - 9:30 am Plenary Talk: Holly Gaff, Old Dominion University. Impact of migration patterns on tick-borne disease expansion. SFHB 139 – Caterpillar Auditorium									
9:45 am - 10:45 am Concurrent Sessions									
State Farm Hall of Business 131	State Farm Hall of Business 132	State Farm Hall of Business 133	State Farm Hall of Business 148	State Farm Hall of Business 149	Start Times				
Todd Oberg	Andrew Leahy	Ellen Ziliak	Bohdan Khomtchouck	Gonzalo Landeros	9:45 AM				
A Calculus of Mathematics Certification	Using SMS Texts to Communicate with Students in Mathematics Courses	Coset Enumeration and Modified Coset Enumeration an Approach to Group Extensions	A Laplacian Derivation of Zipf's Law	An Android App for a Homophonic Password Generator					
			Jessica Klister	Kiran Munir	10:05 AM				
	David Barker	Ryan Bunge	On Rosa-type labelings of directed graphs	Stream Cipher and Watermarking Methods in the Medical Field	10:15 AM				
			Sreevidya Bodepudi	Joseph Buchanan	10:25 AM				
	Implementing Mathematics Research Experiences into Teacher Preparation Programs	On lambda-fold Rosa-type Labelings and Cyclic Graph Decompositions	The Dynamics of an SIR Model with Constant and Pulse Vaccination with Horizontal and Vertical Transmission	On d-modular labelings of the union of two cycles					
11:00 am-12:00 pm Concurrent Sessions									
Jim Olsen	Wesley Calvert	Anthony DeLegge	Edward Price	Ellen Sparks	11:00 AM				
Common Core Math Standards and Teacher Education Session	Algebra and Logic of Random Variables	An Epidemic Model with a Multi-Stage Vaccine	Building Group Extensions Storing Only 2-Cocycles for Relators	On 2-fold graceful labelings					
			Andreana Holowatyj	Seerat Hassan	11:20 AM				
	William Green	Andrew Mansheim	Hextile Planar Isotopy and Reidemeister Moves	The Dynamics of Continuous andImpulsive SIR-SVS Epidemic Models	11:30 AM				
			Alexander Sistko	Katherine Hunzinger					
	Integrating factors and repeated roots of the characteristic equation	Easy and 2 Plus 2: A Simple Yet Thought- Provoking Investigation	Tau-N Factorizations in the Integers	The Dynamics of an Impulsive Two-Prey One-Predator System	11:40 AM				
12:10 - 1:10 Plenary Talk: Annalisa Crannell, Franklin & Marshall Collge. Math and Art: The Good, the Bad, and the Pretty. SFHB 139 – Caterpillar Auditorium									
1:10 Box Lunch Available at Registration	•	, , ,	•						
		1:15-3:15 ISMAA Project NEXT Post-Conference Session, Cindy Traub, Chair							