## PROGRAM for the Indiana Section MAA FALL MEETING 2012 Butler University Saturday, October 27, 2012 Gallahue and Pharmacy Halls

8:00-8:40	Registration
Gallahue Lobby	
8:40-2:30	MAA Book Sale
Pharmacy	
Room 106B	
8:40-8:45	Welcome by Dr. Stuart Glennan
Gallahue	Associate Dean, College of Liberal Arts & Sciences, Butler University
Room 108	
8:45-9:45	Sam Wagstaff, Department of Computer Science, Purdue West Lafayette
Gallahue	The Search for Aurifeuillian-Like Factorizations in the Cunningham Tables
Room 108	Introduction: Mel Royer

	Contributed talks					
Room	Pharmacy Room 202 Moderated by: Robert Merkovsky	Pharmacy Room 205 Moderated by: Mel Royer	Pharmacy Room 212 Moderated by: Justin Gash			
10:00- 10:25 (25 min)	Explore International Math Opportunities for Teaching, Scholarship, and Service Ron Benbow		Board and Card Games in Finite Mathematics Derek Thompson (*)			
10:30- 10:55 (25 min)	An Abstract Encoding of Surfaces Tiled by Parallelograms Drew Reisinger (**)		Why Did I Ever Choose This Major? Derek Linn (**)			
11:00- 11:25 (25 min)	An Algebraic Approach to Geometric Proof Using a Computer Algebra System Michael Xue	Quantum Mechanics from a Geometric Point of View Barbara Sanborn	Indiana Project NExT Panel Session Inquiry Based Learning			
11:30– 11:50 (20 min)	Roshambo and Other Games James Carter (*)	Solutions to a Model for Heat Conducting Flow Matthias Youngs (*)	Mindy Capaldi Dana Ernst Robert Talbert Moderator: Stacy Hoehn			

## • student talks: (\*) graduate student; (\*\*) undergraduate student

12:00-1:00	Lunch
Eidson-Duckwall Recital Hall	
Ford Salon	
12:00-1:00	Executive Committee Meeting
Pharmacy	
Room 202	

		Contributed talks	
Room	Pharmacy Room 202 Moderated by: Robert Merkovsky	Pharmacy Room 205 Moderated by: William Lindsey	Pharmacy Room 212 Moderated by: Justin Gash
1:10– 1:30 (20 min)	Coset Extensions of Real Numbers Horia Petrache	Resequencing Calculus: An Early Multivariate Approach Mark Gruenwald	The Probability that a Polynomial with Integer Coefficients Has All Real Roots Lirong Yuan (**)
1:35- 1:50 (15 min)	Estimating the Total Number of STD Patients in Large Community by Using Multistage Sampling Techniques Hengshuo Zhang (**)	Toward the Maximum and Minimum Symmetry of Order 24 Groups''Bug'' Analogy Dennis Collins	Estimating the Abundance of Clustered Animal Population by Using Adaptive Cluster Sampling and Negative Binomial Distribution Yizhou Bo (**)

• student talks: (\*) graduate student; (\*\*) undergraduate student

2:00-3:00	Paul Zorn, Department of Mathematics, St Olaf College & MAA President
Gallahue	Picturing Analysis
Room 108	Introduction: Mel Royer

GENERAL ADJOURNMENT -- See you March 29-30, 2013 at Indiana University East!