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

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


| Contributed talks |  |  |  |
| :---: | :---: | :---: | :---: |
| Room | Pharmacy Room 202 <br> Moderated by: <br> Robert Merkovsky | Pharmacy Room 205 Moderated by: Mel Royer | Pharmacy Room 212 Moderated by: Justin Gash |
| $\begin{aligned} & 10: 00- \\ & 10: 25 \\ & (25 \mathrm{~min}) \end{aligned}$ | Explore International Math Opportunities for Teaching, Scholarship, and Service Ron Benbow |  | Board and Card Games in Finite Mathematics Derek Thompson (*) |
| $\begin{aligned} & 10: 30- \\ & 10: 55 \\ & (25 \mathrm{~min}) \end{aligned}$ | An Abstract Encoding of Surfaces Tiled by Parallelograms Drew Reisinger (**) |  | Why Did I Ever Choose This Major? Derek Linn (**) |
| $\begin{aligned} & \hline 11: 00- \\ & 11: 25 \\ & (25 \mathrm{~min}) \end{aligned}$ | 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 |
| $\begin{aligned} & 11: 30- \\ & 11: 50 \\ & (20 \mathrm{~min}) \end{aligned}$ | Roshambo and Other Games James Carter (*) | Solutions to a Model for Heat Conducting Flow Matthias Youngs (*) | Mindy Capaldi Dana Ernst Robert Talbert <br> Moderator: Stacy Hoehn |

- student talks: (*) graduate student; (**) undergraduate student

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


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

- student talks: $\left(^{*}\right)$ graduate student; (**) undergraduate student

| 2:00-3:00 | Paul Zorn, Department of Mathematics, St Olaf College \& MAA President <br> Gallahue <br> Poom 108 |
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GENERAL ADJOURNMENT -- See you March 29-30, 2013 at Indiana University East!

