# The 29 ${ }^{\text {th }}$ Annual Rose-Hulman Conference on Undergraduate Mathematics Detailed Daily Schedule 

Schedule of Events for Friday, 13 April 2012
12:00 p.m. - 1:30 p.m.: Lunch in the Main Dining Room in the Hulman Memorial Union
1:30 p.m. - 1:40 p.m.: Welcome, E-104, Moench Hall
Bill Kline, Interim Dean of Faculty and Professor of Engineering Management Rose-Hulman Institute of Technology

1:40 p.m. - 2:40 p.m.: Invited Speaker Presentation, E-104, Moench Hall Why Math is Fun: Convergence, Connections and the Great Unknown Dr. Judy Holdener, Kenyon College

2:45 p.m. - 3:00 p.m.: Soda and Snack Break, Room G-220, Crapo Hall
Contributed Student Presentations

|  | Room G-219, Crapo Hall | Room G-221, Crapo Hall | Room G-222, Crapo Hall |
| :--- | :--- | :--- | :--- |
| 3:10-3:30 p.m. | Pascal to the Rescue <br> Adam Lewis | Good or Bad: Altering <br> Admission Standards <br> Mark Woods |  |
| 3:40 - 4:00 p.m. | To Construct a Hyperbolic <br> Triangle... <br> Scott Rexford | d-Nice Numbers <br> David Irwin | Predicting Retention of <br> Marginally Admitted Students <br> Morgan Perkins |

4:00 p.m. - 4:20 p.m.: Soda and Snack Break, Room G-220, Crapo Hall
Contributed Student Presentations

|  | Room G-219, Crapo Hall | Room G-221, Crapo Hall | Room G-222, Crapo Hall |
| :--- | :--- | :--- | :--- |
| 4:20-4:40 p.m. | Mercury pollution: <br> Modeling Around the A.B. <br> Brown and Gibson <br> Generating Stations <br> Matthew Harris | Connections between Central <br> Sets and Cut Sets in Zero- <br> Divisor Graphs of Commutative <br> Rings <br> Lane Bloome | Building Predictive Models in <br> Absence of Theory <br> Trent Tabor |
| 4:50-5:10 p.m. | Hortonian scaling of <br> maximum flow in non- <br> idealized river basins <br> Trent Tabor, Chase <br> Mathison, James Folberth | Statistical Analysis of Prime <br> Factors <br> Aaron Davis | Optimizing Beam Selection in <br> Radiotherapy |
| Jill Shuman |  |  |  |

5:30 - 6:45 p.m.: Dinner in the Faculty Dining Room in the Hulman Memorial Union
7:00 - 8:00 p.m.: Invited Speaker Presentation, Room E-104, Moench Hall
LEGO: The Intersection of Art and Engineering
Mr. Andy Milluzzi, Rose-Hulman Institute of Technology
8:30 - ?: Student and Faculty Parties. The Student Party will be in Chauncey's Game Room, and the Faculty/Guest Party will be at the home of Drs. Leanne and Al Holder. (See folder for directions.)

8:00 - 8:55 a.m.: Donuts, coffee, and other snacks in the Moench Commons Area

* Book gifts for student speakers on display (submit list of preferences).

9:00-10:00 a.m.: Invited Speaker Presentation, E-104, Moench Hall
Perfect and Abundant Numbers - a Perfect and Abundant Source for Undergraduate Research Projects
Dr. Judy Holdener, Kenyon College
Contributed Student Presentations

|  | Room G-219, Crapo Hall | Room G-221, Crapo Hall | Room G-222, Crapo Hall |
| :--- | :--- | :--- | :--- |
| 10:10-10:30 a.m. | A Mathematical Model for <br> the Baking Process - <br> Phenomenological <br> Approach <br> Andrew Harris | Understanding Coulomb <br> Potential: An Unproven <br> Array of Points <br> Meagan Ryan | Robustness Test for a <br> Protein Alignment <br> Algorithm |
| Jacki Simon |  |  |  |$|$| 10:40-11:00 a.m. |
| :--- |
| Breaking Down the <br> Riemann Hypothesis <br> Chelsey Barron |
| The U.S. Life Insurance <br> Industry: Time Series <br> Analysis <br> Jackie Buhrman |
| An Introduction to Object <br> Oriented Design Principles <br> and Their Benefit to <br> Mathematicians <br> Joseph Gasper |

11:00 - 11:20 a.m.: Soda and Snack Break, Room G-220
Special Sessions

|  | Room G-219, Crapo Hall | Room G-221, Crapo Hall | Room G-222, Crapo Hall |
| :--- | :--- | :--- | :--- |
| 11:20-12:10 p.m. | Graduate Student Panel <br> Michael Fitzpatrick, <br> Trenton Schirmer, <br> Brian Shourd <br> Greg Zynda | Q\&A about a Career in <br> Actuarial Science <br> Brad Jones | Stick With It! (Why math <br> matters now more than ever.) <br> Andrew Rourke |

## 12:15-1:30 p.m.: Lunch \& Book Gifts in The Worx in the Hulman Memorial Union

**Access to the wireless network can be obtained by using the username and password: mathconf-guest

We would like to thank Addison Wesley (Pearson), Cengage Learning, Corwin Press, Duxbury, Farrar, Straus and Giroux, Jones \& Barlett Learning, Macmillan, McGraw Hill, Pearson Education, Prentice Hall, Sage Publishing, SAS Press, Walker Books, W.H. Freeman, and Wiley publishers for their generous donation of books for the textbook giveaway. We are also grateful to Minitab, Maplesoft, and the MAA for their generous donations of software and other goodies.

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