

Student Talks at ISMAA April 7-8, 2006, North Central College

There will be 26 talks presented by student speakers from 6 different colleges across Illinois.

Here is the schedule:

**Friday, April 7**

| Rooms       | Old Main 302   | Old Main 521   | Goldspohn 22   |
|-------------|--|--|--|
| 2:00-2:15pm | <i>Misleading Pathological Mistakes</i><br>Jessie Carr,<br>Illinois College                          | <i>Sending Messages through an Ion Channel</i><br>Delin Wang,<br>Benedictine University                                    |  |
| 2:20-2:35pm | <i>The Prime Number Theorem</i><br>Jennifer Muskovin,<br>Benedictine University                      | <i>The Continuous Birthday Problem</i><br>Josh Barks,<br>Olivet Nazarene University  |  |
| 2:40-2:55pm | <i>On Base Percentage: What is it Good for?</i><br>Pablo Marquez,<br>Benedictine University          | <i>RSA Attack</i><br>Janet Scardino and Dan Faber,<br>Benedictine University   |  |
| Break       |  |  |  |
| 3:15-3:30pm | <i>Existence of Regular Stick Numbers of Knots</i><br>Kenneth Miller,<br>Benedictine University      | <i>Breaking Data Encryption Standard Through DNA Computation</i><br>Ivana Stefanovska,<br>Benedictine University           | <i>Symmetries of Differential Equations</i><br>Andrew Greene,<br>Bradley University  |
| 3:35-3:50pm | <i>The arccos(-1/3)-regular Stick Number of Knots</i><br>Debbie Witczak,<br>Benedictine University   | <i>Musical Symmetries from the Baroque, Classical, and Romantic Periods</i><br>Christine Martin,<br>Benedictine University | <i>A Proof of the Hardy-Ramanujan-Rademacher Expansion for <math>p(n)</math></i><br>Eugene Eyeson,<br>Benedictine University |
| 3:55-4:10pm | <i>Understanding Calculus Theorems Using Hyperreals</i><br>Leon Coleman,<br>Chicago State University | <i>Steganographs found in DNA encrypting 3-dimensional protein structure</i><br>Shakil Hafiz,<br>Benedictine University    |  |

**Saturday, April 8**

| Rooms         | Old Main 302  | Old Main 521  |
|---------------|---|---|
| 9:40-9:55am   | <i>Lie Groups and Several Examples</i><br>Mingjie Yang,<br>Benedictine University                           | <i>Undeniable Signatures: Knowing How to Keep a Secret</i><br>Aimee-Jasmine C. Paran,<br>Benedictine University |
| 10:00-10:15am | <i>Crash Course in Lie Algebras</i><br>Robert Maynard,<br>Benedictine University                            | <i>Monte Carlo Estimation of the Price of an Option</i><br>Derek Serrano,<br>Augustana College                  |
| 10:20-10:35am | <i>How do you factor <math>n!</math></i><br>Robert Andry,<br>Bradley University                             | <i>A Term in Australia</i><br>Andrew Brasile,<br>Augustana College  |
| Break         |   |   |
| 10:50-11:05am | <i>Coloring Rational Knots</i><br>Ryan Ephgrave,<br>Bradley University                                      | <i>Reconstructing Phylogenies</i><br>Courtney Cook,<br>Augustana College  |
| 11:10-11:25am | <i>Knotted Ribbons (Not Ribbon Knots)</i><br>Jason Wood,<br>Bradley University                              | <i>Genealogy Graphs</i><br>Christina Gillen,<br>Augustana College   |
| 11:30-11:45am | <i>Computer Simulation of Enigma: Is Enigma Still Secure?</i><br>Russel Zagorski,<br>Benedictine University | <i>On the Center of a Graph</i><br>Sara Muhs,<br>Augustana College  |

The student speakers are:

Robert Andry, Ryan Ephgrave, Andrew Greene & Jason Wood, Bradley University; Andrew Brasile, Courtney Cook, Christina Gillen, Sara Muhs, & Derek Serrano, Augustana College; Jessie Carr, Illinois College; Leon Coleman, Chicago State University; Joshua Barks, Olivet Nazarene University; Christine Martin, Jennifer Muskovin, Shakil Hafiz, Ken Miller, Robert Maynard, Debbie Witczak, Pablo Marquez, Janet Scardino, Dan Faber, Aimee Paran, Delin Wang, Ivana Stefanovska, Mingjie Yang, Eugene Eyeson & Russel Zagorski, Benedictine University.