

Program for the 2009 Annual Meeting

Kentucky State University, Frankfort

March 27 - 28, 2009

Note: All times listed are Eastern Daylight Time (EDT). Undergraduate student speakers are indicated by (u), graduate student speakers are indicated by (g), and faculty speakers are indicated by (f).

Friday, March 27

2:30-5:30pm Registration Hathaway Entrance

2:30-5:00pm Refreshments Hathaway 112

2:30-5:30pm Book Exhibits Hathaway 112

2:30-5:30pm Student Lounge Hathaway 126

3:30-3:45pm Contributed Papers

Nate Adams, Jonathan Butcher, and Stephanie Lawrence, Asbury College (u)
Roundabouts: Round and Round We Go. Hathaway 114

Brad Schneider, Morehead State University (u)
Ground Station Software: A Dynamic and Scripted Approach. Hathaway 120

Eungchun Cho, Kentucky State University (f)
Detection of Break Points in Time Series. Hathaway 122

3:50-4:05pm Contributed Papers

Joseph D. Chambers, Robert DiMartino, and Nathan Potratz, Asbury College (u)
Energy and the Cell Phone: A Model of the Next Fifty Years. Hathaway 114

Michael Blankenship, Morehead State University (u)
Hybrid Broadcast Encryption Scheme for Heterogeneous Mobile Ad Hoc Networks.
Hathaway 120

Ken Dutch, Eastern Kentucky University (f)
Small-Sample Monte Carlo Distributions. Hathaway 122

4:10-4:25pm Contributed Papers

Jennifer Fischesser, Eastern Kentucky University (u)
Kissing Numbers in the Dark. Hathaway 114

Amir Ahmadi, Morehead State University (u)
Lagrangian Multiplier Method. Hathaway 120

Andy Martin, Kentucky State University (f)
Hemming and Hawing Through History: What Exactly Did Cardano Do in His 1545 Ars Magna? Hathaway 122

Di Wu, Western Kentucky University (f)
Second Derivatives in the Study of Protein Fluctuations Hathaway 130

4:10-4:40pm Informal Discussion on Building Participation in Modeling Competitions
Hathaway 130

4:25-4:50pm Break

4:50-5:05pm Contributed Papers

Amber Rogers, Northern Kentucky University (u)
Entropy and the Hill Cipher. Hathaway 114

Brian Schack, Morehead State University (u)
Cyber Classroom: Designing a Virtual Learning Environment. Hathaway 120

Tonja Miick and Tom Richmond, Western Kentucky University (u/f)
Mechanical Linkages to Sign Your Name. Hathaway 122

Shane Redmond, Eastern Kentucky University (f)
Counting Zero-Divisors. Hathaway 130

5:10-5:25pm Contributed Papers

Kelly Christensen, BJ Pugh, and Joe Thacker, Asbury College (u)
Saving Nemo. Hathaway 114

Casey Hufford, Morehead State University (u)
Ranking the NFL with Monkeys. Hathaway 120

Carl Peterson, Bellarmine University (u)
An Approximation Algorithm for the Facility Location Problem. Hathaway 122

Barry Brunson, Western Kentucky University (f)
Arrrgh! Arcsecant?! Hathaway 130

5:30-5:45pm Contributed Papers

Tyler Clark, Western Kentucky University (u)
A 3-D Approach to a Trig Identity. Hathaway 114

Joshua G. Bradley, Morehead State University (u)
Mobile Data Mining. Hathaway 120

Chris Austin, Murray State University (g)
Some Novel Separation Axioms. Hathaway 122

Steven Wilkinson, Northern Kentucky University (f)
Introductory Computer Programming for Mathematics. Hathaway 130

6:00-7:30pm Banquet Ballroom, Hill Student Center (4th floor)

7:30-8:30pm Invited Address

Betty Mayfield, Hood College
Women and Mathematics in the Time of Euler
Hathaway 123

8:30pm Aftermath Hathaway 217

Saturday, March 28

8:00-11:00am Registration Hathaway Entrance

8:00-11:00am Refreshments Hathaway 112

8:00-11:20am Book Exhibits Hathaway 112

8:00-11:20am Student Lounge Hathaway 126

8:20-8:35am Contributed Papers

Michael Blankenship, Russell Fugate, and John Wellman, Morehead State University (u)
Radio Frequency Logging Software (RFLS). Hathaway 114

Katie Jones and Grayson Rodriguez, Northern Kentucky University (u)
Florida Serial Killers: Casting Doubt on Current Dogma (Part I). Hathaway 120

Brandon Cayton, Murray State University (g)
The Game of Nim. Hathaway 122

Joshua Sparks, Eastern Kentucky University (u)
Using Cryptology in Correspondence Chess Hathaway 130

8:40-8:55am Contributed Papers

Ryan Walls, Murray State University (u)

A Computable Embedding of Knots to Labeled Graphs. Hathaway 114

Katie Jones and Grayson Rodriguez, Northern Kentucky University (u)

Florida Serial Killers: Casting Doubt on Current Dogma (Part II). Hathaway 120

J. Austin French, Georgetown College (f)

Timeless Trigonometry for Calculus. Hathaway 122

Tucker Davis, Western Kentucky University (g)

A Revised Updated Geometric Build-up Algorithm for Solving Molecular Distance Geometry Problems. Hathaway 130

9:10-10:00am 2008 Distinguished Teaching Awardee Address

Pat Costello, Eastern Kentucky University

P-A-S-C-A-L M-A-G-I-C

Hathaway 123

10:00-10:20am Break

10:20-10:35am Contributed Papers

Rob Donnelly, Murray State University (f)

Edge-colored Distributive Lattices from Representation Theory. Hathaway 114

Joel Charalambakis, Brian Hazlett, and Joe Purcell, Asbury College (u)

Got Milk? Hathaway 120

Stacy S. Long, Georgetown College (u)

Simulating Positron Production at JLab using the Geant4 Code. Hathaway 122

Chris Fronk, Northern Kentucky University (u)

Creating an Efficient Algorithm for Rendering Implicit Plots. Hathaway 130

10:40-10:55am Contributed Papers

Joshua Hyatt, Murray State University (u)

Bidigraph Representations for Finite Edge Colored Lattices. Hathaway 114

Brian Salyer, Morehead State University (u)

Equivalence Number of G. Hathaway 120

D. Jacob Wildstrom, University of Louisville (f)

A Decade in Mathematical Fiber Arts. Hathaway 122

Chris Christensen and David Agard, Northern Kentucky University (f)

William Dean Wray (1910 – 1962), Mathematician/Cryptologist. Hathaway 130

11:00-11:15am Contributed Papers

Meredith Stevenson, Murray State University (u)

A New Fuzzy Time Series Method for Forecasting Enrollments. Hathaway 114

Ben Clapp, Keri Eustis, and Kara Wiltrout, Asbury College (u)

Holy Crap: Modeling Milkfish Excretions. Hathaway 120

Kirsten Fleming and Alice Gabbard, Kentucky Center for Mathematics (f)

Kentucky Center for Mathematics: Opportunities for Collaboration? Hathaway 122

Russell Brown, University of Kentucky (f)

What is a High School Math Day? Hathaway 130

11:30am-12:30pm Invited Address

Ed Burger, Williams College

How Always to Win at Limbo, or: You can sum some of the series some of the time, and some of the series none of the time... but can you sum some of the series ALL of the time? Hathaway 123

12:40-1:30pm Lunch University Club, Hill Student Center (2nd floor)

1:15-1:45pm Business Meeting University Club, Hill Student Center

2:00pm KYMAA Executive Committee Meeting