Student Contributed Paper Sessions



Eastern Pennsylvania and Delaware Section of the Mathematical Association of America

Delaware Valley University November 14, 2015



Session I-A: Undergraduate Student Talks (LFSC101)

- 1:10 The Tower of Hanoi Catherine Deng, Gia Storti, University of the Sciences
- 1:23 Pascal's Triangle
 Sabal Yousef, Ryan Paulukinas, University of the Sciences in Philadelphia
- 1:36 Fibonacci Sequence
 Luke Conover, Taylor Scott, University of the Sciences in Philadelphia
- 1:49 A Mathematical Analysis of M.C Escher's Art
 Amy Lai, Kimberly Waters, University of the Sciences in
 Philadelphia
- 2:02 Triangulation: The History of Global Positioning
 Dylan Tomares, Barbara Rojas, University of the Sciences in
 Philadelphia
- 2:15 The History and Concepts of Infinity
 Courtney Messenger, Edwin Fluck, University of the Sciences

Session I-B: Undergraduate Student Talks (LFSC102)

- 1:10 Constructive Galois Theory with Linear Algebraic Groups
 J.T. Ferrara, Bucknell University
- 1:23 Predicting Alzheimer's Disease with Microarray Gene Expression
 Data
 Trevor Adriaanse, Bucknell University
- 1:36 Multiple Sclerosis, Lattitude, and Sunlight: Developing Correlations between MS and the Latitude Theory
 Elizabeth Bloom, Nick Mandarano, Saint Joseph's University
- 1:49 *How Now Brown Tau: Finding Weakly Sum-Free Sets*Samuel Edwards, Gettysburg College
- 2:02 Minimum size of spanning set in finite cyclic group Aawaz Raj Pokhrel, Gettysburg College

Session I-C: Undergraduate Student Talks (LFSC103)

- 1:10 Brownian Dynamics of a Charged Particle Passing Through a
 Magnetic Plate
 Christopher Tran, Arthur Newell, Delaware State University
- 1:23 Effects of Fourier Series and Transformations on Chemistry Lauren Rusiloski, Delaware Valley University
- 1:36 Prescribing Drug Dosage
 Karla Keler, Ruth Trubnik, Delaware Valley University
- 1:49 Mathematical Modeling in the Food Industry: A Model of Heat Transfer by Conduction Erin Nese, Ruth Trubnik, Delaware Valley University

Session I-D: Undergraduate Student Talks (LFSC104)

- 1:10 Reimann Sums
 Craig Siekierka, Misericordia University
- 1:23 On the Differences between Consecutive Prime and Semi-prime Numbers
 Sharif Moustafa, Muhlenberg College
- 1:36 Completely Puzzling Latin Squares Shantel Silva, Villanova University
- 1:49 *Coinbinatorics*Jiao Xu, Kutztown University

Session I-E: Graduate Student Talks (LFSC105)

- 1:10 Graph Cut Energy Minimization Techniques for Image Segmentation Shana Brown, Delaware State University
- 1:30 Reaction Kinetics in Optical Biosensors Ryan Evans, University of Delaware
- Analysis of the Chebyshev Spectral Collocation Method for

 Numerical Solutions of Non-Linear Partial Differential Equations

 Matthew Neil Moore, Delaware State University
- 2:10 Synthetic Shape Segmentation using Snakes Azubuike Okorie, Delaware State University