



2023 MAA MathFest
Undergraduate Student Poster Session
Outstanding Posters

6, Consecutive Integer Matrices and Their Properties

Kelsey DeAcosta, Cole Hadley, Ashhad Hanafi, & Trevor Wylezik

10, Uncertainty Quantification of Segmentation in Computed Tomography

Ioannis Paraschos, Ellie Kienast, Hadley Santos-Del Villar, & Nathaniel Reimer

20, A Sentiment Analysis of Texts Published Before and During the Covid-19 Pandemic

Emily Musgrove

26, A dynamical study of a mating system with sex-biased predation for invasive species control

Margaret Cathcart, Charles Ohanian, & Nihal Kumar

27, Predicting tropical cyclone paths through learning from existing methods

Dannie Dong

30, A Mathematical Approach for Optimizing Linguistically-Induced Analgesia

Ryka Chopra

37, Using a SIR-type mathematical model to understand human behavior in epidemic dynamics

Angelique Santiago & Jasmin Nunuvero

41, Modeling Disease Transmission and Control in Long-Term Care Facilities

Lizbeth Leon, Brittany Stephenson, & Harold Arriaga

45, Impartial Geodetic Games on Graphs

Laila Mahrat

52, Information Theory Through Games

Jay Whitmon

54, Some Results in Curvilinear Triangle Geometry

Khush Agrawal, Jonathan Allarasse, & Hannah Proctor

58, Circle Packings From Tilings Of The Plane

Mengyuan Yang, Philip Rehwinkel, & David Yang

59, Fundamental Groups of Hamming Graphs

Keira Behal

60, Properties of Chip-Firing Distribution Graphs

Kyle Kelley, Charles Gong, & Philip Thomas

71, 3D Printing and its applications towards learning and student comprehension in Calculus 3 Classrooms

Michael Ernst

72, Student Understandings of the Limit Definition of the Derivative

Samuel Dolinger

75, Approximating Irrational Triangles

Emmy Lin

76, Nonvanishing of mock theta functions

David Metacarpa & Wenche Tseng

83, p -Adic Valuation Trees

Dillon Snyder, Laura Vaughan, & MaeKayla Minton

94, Reliable Measurement in the Presence of Learning and Fatigue Effects with Stopping Rules

Stephanie Lara-Sotelo

97, Survival Probabilities of Counting-Out Games on a Line

Bryce Thalheimer