



MAKO Undergraduate Mathematics Research Conference – 2024

Saturday, November 9

Schedule

Note: This schedule is tentative. If a speaker finishes early, we will start up again after a five-minute break.

8:30 am – 9:00 am	Coffee and Pastries – Cheek Lobby
9:00 am – 9:05 am	Welcome
9:05 am – 9:55 am	Invited Talk: “How and Why to Count Polynomial Roots” Dr. Matt Wright, Missouri State University
10:00 am – 10:25 am	“Super Basic Palindromic Numbers” Samuel Fulbright, Drury University
10:30 am – 10:55 am	“Mathematical Modeling of EGaIn Droplets Sliding Down an Inclined Plane” Luis Schneegans, University of Missouri, St Louis
11:00 am – 11:25 am	“Analysis of Braess’s Paradox using Lagrange Multipliers” Jayson McDermott, Lyon College
11:30 am – 11:55 pm	“An Elementary Exploration of Cryptography” Benjamin Brewster, Evangel University
noon – 12:25 pm	Lunch – Cheek Lobby
12:30 pm – 12:55 pm	“Evaluation of Self-Outputting Functions” Sam Stagner, Drury University
1:00 pm – 1:25 pm	“Toe Tac Tic - A Game and It's Winning Strategy” Tori Risner, Evangel University
1:30 pm – 1:55 pm	“The HRT Conjecture in Finite Fields” Christopher Housholder and Layna Mangiapello, Missouri State University
2:00 pm – 2:25 pm	“An SIR model for Colorectal Cancer with Curcumin Treatment” AJ Agers, Aly Boyd, Kami Eslinger, and Kylie Warden, Drury University
2:30 pm – 2:55 pm	“Using the Schmidt Decomposition Method to Determine Quantum Entanglement and Its Application to Quantum Information Theory” Lane Boswell, Drury University
3:00 pm – 3:25 pm	“Machine Learning for The Game of Hex” Justin Kroh, Drury University
3:30 pm – 3:35 pm	Final Remarks