2021 MAA Outstanding Student Paper Session Presentation Awards

Presenters	**Title**
• Ethan Partida, *University of Minnesota Twin Cities*	Real Powers of Monomial Ideals
• Horace Fusco, *Carleton College* • Collin Smith, *Carleton College*	The importance of being discrete: dynamics of flow-kick disturbance models
• Anna Dietrich, *Amherst College* • Keane Ng, *Amherst College* • Chloe Stewart, *Amherst College* • Shixiong (Leo) Xu, *Amherst College*	Partitions and Quantum Modular Forms
• Doel Rivera, *Pontifical Catholic University of Puerto Rico*	Affine Hermitian Grassman Codes
• Andrew Clickard, *Bloomsburg University of Pennsylvania*	Synthetic Geometry in Simplices of Constant Curvature
• Hannah Guan, *Basis San Antonio Shavano*	The Genetics of Human Aging: Predicting Age and Age-Related Diseases by Deep Mining High Dimensional Biomarker Data
• Miles Mena, *Lewis University* • Jonathon Figueroa Reyes, *Baruch*	K-component Probabilities of Spanning Forest Building Techniques
• Alyssa Brasse, *Hunter College* • Nevin Etter, *Washington and Lee* • Gustavo Flores, *Carleton College* • Andrew Miller, *University of California Santa Barbara* • Summer Soller, *University of Utah*	Elliptic curves with non-trivial isogeny
• Beth Anne Castellano, *Lafayette College* • Marcella Manivel, *Carleton College*	Algebraic and Combinatorial Properties of Down-Left Graphs
• Karthik Seetharaman, *Massachusetts Academy of Mathematics and Science at WPI*	Comparing Measures For The Identification Of Partisan Gerrymandering

• Nooria Ahmed, *Swarthmore College* • Jake Viscusi, *Swarthmore College* • Emilie Rivkin, *Swarthmore College*	Domains of Convergence for Polyhedral Circle Packings
• Noe Reyes, *Andrews University* • Jeannelle Green, *Andrews University* • Moises Reyes, *Andrews University* • Gabriel Palacios, *Andrews University*	On the Delta-Unlinking Number
• Caleb Froelich, *Walla Walla University*	Numerically Solving the Equations of Planetary Motion with an Adaptive Runge-Kutta Method
• Rosa Flores, *Dixie State University* • Christian Riordan, *Dixie State University*	Assessing the Efficiency of Predator-Prey Control Strategies in the Persistence of Dengue with Wolbachia Transinfection
• Mackenzie Ray, *Augsburg University*	4D Hypercube Perspective Modeling Using 3D Printing for Educational Purposes
• Aidan O'Keeffe, *University of Texas at Austin* • Jack Reever, *University of Connecticut*	Agent based models of brain network communication
• Calia Kugler, *Binghamton University*	Patterns Between the Number of Cevians or Caliians and the Regions That They Form in Polygons
• Zachary Couvillion, *Dartmouth College* • John Lin, *Binghamton University* • Patrick McCourt, *Kent State University*	Recursions, q-series and intertwining operators
• Yash Agarwal, *Dougherty Valley High School*	Convolutional encoder decoder network for the removal of coherent seismic noise
• Marisa Cofie, *University of Maryland* • David Zeng, *Yale University*	Time to steady state for box-ball systems using RSK
• Ebtihal Abdelaziz, *Goshen College*	A Coalition Game on Finite Groups

• Ryka Chopra, *William Hopkins Junior High School*	Does the tail wag the dog, after all? Obesity Clusters and their influence on the predatory location choice of new fast food chain franchisees
• Catherine Brennan, *University of Colorado, Boulder*	Exploring the Potential for Gerrymandering Within Single And Multi-Member Legislative Redistricting Plans
• Letong (Carina) Hong, *Massachusetts Institute of Technology*	Markov chain on edge-colorings of bipartite graphs
• Julia Shneidman, *Rutgers University* • Sarah Ruth Nicholls, *Wake Forest University*	Curve Configurations on Non-Orientable Surfaces

Andersen Prize

The Andersen Prize, awarded in memory of Janet Andersen by the SIGMAA for Mathematical and Computational Biology, recognizes an outstanding presentation and work in areas related to mathematical biology.

• Averly Sheltraw, *Oberlin College* • Luz Melo, *SUNY Geneseo* • Ana Abreu, *Bronx Community College* • Caleb Mahlen, *Regis University*	Age-Structured Models for COVID-19 Outbreaks and Public Health Interventions