

# 101<sup>st</sup> Annual Meeting of MAA Texas: Morning Breakout Sessions – UNDERGRADUATE

Zoom Link will be emailed to all registrants

Room 1 <i>Moderator: Bill Ardis</i>	Algebra, Number Theory, Discrete Mathematics
09:45 – 10:00 am	My Journey to Find a Uniformly Most Reliable Graph <b>Daniël Du Preez</b> , The University of Texas at Tyler
10:00 – 10:15 am	The Tale of Mickey The Tricky Mouse <b>Nicholas Phan</b> , St. Edward's University
10:15 – 10:30 am	Counting Constellations in Tarot Card Readings <b>Stella Cunningham</b> , St. Edward's University
10:30 – 10:45 am	Unfolding Platonic Solids <b>Taylor Huey</b> , St. Edward's University

Room 2 <i>Moderator: K Thapa Magar</i>	Applied Mathematics, Probability and Statistics
09:45 – 10:00 am	Revenue Play by Play <b>Ca Shunn Harris, Abram Garza</b> , Texas A&M University - Texarkana
10:00 – 10:15 am	Bootstrap-based Error Rate Estimator for the Linear Discriminant function <b>Nicholas C. Taylor</b> , University of Mary Hardin-Baylor
10:15 – 10:30 am	The M2 Money Supply, the Economy, and the National Debt: A Mathematical Approach <b>Brad Crayne And Xavier Williams</b> , Texas A&M University - Texarkana

Room 3 <i>Moderator: Jason Snyder</i>	Education, History and Art, Geometry
09:45 – 10:00 am	Component-Preserving Amphicheiral Links <b>Laufey Jörgensdóttir</b> , St. Edward's University
10:00 – 10:15 am	Polygons vs Circles <b>Donna E. Robles</b> , University of Texas at San Antonio
10:15 – 10:30 am	Shifting the Focus <b>Quan Q. Nguyen</b> , University of Texas at Austin/Mathhappens Foundation

Room 4 <i>Moderator: David Rice</i>	Analysis and Applied Math
09:45 – 10:00 am	Dynamics of Eastern Equine Encephalitis Infection Rates: A Mathematical Approach <b>Aurod Ounsinegad</b> , Tarleton State University
10:00 – 10:15 am	A population model of <i>Pieris Brassicae</i> using differential equation <b>Dashon Mitchell</b> , Tarleton State University
10:15 – 10:30 am	Parallel Algorithms for Background Subtraction <b>Ethan Reaves</b> , Tarleton State University
10:30 – 10:45 am	Binary Star Mass Transfer Model with NVIDIA GPUs <b>Clayton Tobin</b> , Tarleton State University

# 101<sup>st</sup> Annual Meeting of MAA Texas: Afternoon Breakout Sessions – FACULTY/GRADUATE

Zoom Link will be emailed to all registrants

Room 1 <i>Moderator: Dustin Potter</i>	Algebra, Number Theory, Discrete Mathematics
2:00 – 2:15 pm	Using Apolar Invariants to Find Roots of Polynomials <b>Dr. Kris Jorgenson</b> , Sul Ross State University
2:15 – 2:30 pm	Identities for Powers of Fibonacci Numbers <b>Eduardo Chappa</b> , New Mexico State University Carlsbad
2:30 – 2:45 pm	Isomorphism Classes of Graded Skew Clifford Algebras <b>Richard Chandler</b> , University Of North Texas At Dallas
2:45 – 3:00 pm	Anomalous By Association <b>Nicholas Petela</b> , Tarleton State University

Room 2 <i>Moderator: Shellene Foster</i>	Applied Mathematics, Probability and Statistics
2:00 – 2:15 pm	Markov Chains: Random Walks as Choreography <b>Christopher A. Arthur</b> , Collin College
2:15 – 2:30 pm	Gamma function approximations for computing closed-form Bayes factors <b>Tom Faulkenberry</b> , Tarleton State University
2:30 – 2:45 pm	Residential Segregation Patterns and Single-Member Voting Districts <b>Will Hager And Dr. Betseygail Rand</b> , Texas Lutheran University

Room 3 <i>Moderator: Chip Galloway</i>	Education, History and Art, Geometry
2:00 – 2:15 pm	Making Connections and Building Community in an Online Environment <b>Dr. Eileen Faulkenberry</b> , Tarleton State University
2:15 – 2:30 pm	A Framework for Fostering Positive Math and Math Teacher Self-Efficacy in Math Education <b>Melissa Eubank</b> , Baylor University and Tarleton State University
2:30 – 2:45 pm	Investigating Varignon's Problems with GeoGebra <b>Dr José N. Contreras</b> , Ball State University
2:45 – 3:00 pm	Moving Average for Longitudinal Data in Education <b>Dr. Tingxiu Wang</b> , Texas A&M University-Commerce

Room 4 <i>Moderator: Bill Ardis</i>	Analysis and Applied Math
2:00 – 2:15 pm	Concavity and Orthogonality at Saddle Points <b>Dr. John Quintanilla</b> , University of North Texas
2:15 – 2:30 pm	Undergraduate Capstone Project on One Dimensional Flow Problem <b>Dr. Arati Nanda Pati</b> , University of St. Thomas
2:30 – 2:45 pm	What are N Functions and Why are They Interesting <b>Dr. Joseph Iaia</b> , University of North Texas
2:45 – 3:00 pm	Second-Order Modified Nonstandard Finite Difference (NSFD) methods for autonomous differential equations <b>Madhu Gupta</b> , University of Texas at Arlington