

Gulf Coast Undergraduate Research Symposium (GCURS), Mathematics Section, Saturday October 16, 2021

Talks in 227 Hermann Brown	Name	Institution	Title of talk	Field	Mode
BREAKFAST 7:00am - 8:30am in the Brockman Portico					
8:30am - 8:40am Welcome Remarks					
<u>Session 1</u>					
8:45am - 9:05am	Abigail Brauer and	Lewis & Clark College	"Invariant Geometric Structures on Complex Almost Abelian Groups"	Lie groups	In-Person
(Joint presentation)	Oderico-Ben Buran	University of Pennsylvania	(Joint presentation)	(Joint presentation)	(Joint presentation)
9:10am - 9:25am	Andrew Paul	University of California, San Diego	"Topological Properties of Almost Abelian Lie Groups"	Lie groups	In-Person
9:30am - 9:45am	Thi Pham	The University of Texas, Dallas	"Automorphisms of the Fine Curve Graph"	Geometric Topology	In-Person
<u>Session 2</u>					
9:55am - 10:10am	Dane Gollero	University of Utah	"Braid Indices of 1-Bridge Braids"	Knot Theory	Virtual
10:15am - 10:30am	Luke Barbarita	University of California, Irvine	"Enumerating Polyominoes on the Torus and Other Finite Surfaces"	Combinatorics	Virtual
Mid-Morning Snack 10:30am - 10:50am in the Brockman Portico					
<u>Session 3</u>					
10:50am - 11:05am	Sean Li	MIT	"Tamagawa Products for Elliptic Curves over Number Fields"	Analytic Number Theory	Virtual
11:10am - 11:25am	Alexandra Hoey	MIT	"An Unconditional Explicit Bound on the Error Term in the Sato-Tate Conjecture"	Analytic Number Theory	Virtual
11:30am - 11:45am	Maitreyo Bhattacharjee	Indian Association for the Cultivation of Science	"Alternative Expressions and Study of the Odd Integral Values of the Riemann Zeta Function"	Analytic Number Theory	Virtual
11:50am - 12:05pm	Alan Zhao	Columbia University	"Lower Bounds on the Canonical Height of Elliptic Curves of Non-Torsion Points on	Analytic Number Theory	In-Person
LUNCH 12:10pm - 1:00pm in the Brockman Portico					
<u>Session 4</u>					
1:00pm - 1:15pm	Mark Helman	Rice University	"A Theory for Locus Ellipticity of Poncelet Triangle Centers"	Dynamical Systems	In-Person
1:20pm - 1:35pm	Kevin Ren	MIT	" $\%$ -Immanants and Kazhdan-Lusztig Immanants"	Combinatorial Representation	In-Person
1:40pm - 1:55pm	Zhichun Zhang	Swarthmore College	"Friezes from Dissections of $\mathbb{Z}[\sqrt{2}]$ and $\mathbb{Z}[\sqrt{3}]$ "	Combinatorial Representation	In-Person
2:00pm - 2:15pm	Yangxinyu Xie	University of Texas, Austin	"On 2x2 Tropical Commuting Matrices"	Linear Algebra	In-Person
<u>Session 5</u>					
2:25pm - 2:40pm	Shanshan Cao	Boston University	"Periodic Billiard Orbits on Parallel-Meridian Rectangles on Surfaces of Revolution"	Dynamical Systems	Virtual
2:45pm - 3:00pm	Mason Nakamura	Marist College	"Induced Star-Saturated Graphs"	Graph Theory	Virtual
3:05pm - 3:20pm	Joseph Veltri	Purdue University	"Linear Preservers of Eigenvalues Induced by the Two-Dimensional Ice Cream Cone"	Linear Algebra	Virtual
Mid-Afternoon Snack 3:20pm - 3:40pm in the Brockman Portico					
<u>Session 6</u>					
3:40pm - 3:55pm	Christopher Soto	Queen's College of CUNY	"Preferential and k -Zone Parking Functions"	Combinatorics	Virtual
4:00pm - 4:20pm	Lily McBeath and	University of California, Irvine	"Writing a Product of Prime Powers as a Sum of Recurrence Terms"	Computational Number Theory	Virtual
(Joint presentation)	Luisa Velasco	University of Dallas	(Joint presentation)	(Joint presentation)	(Joint presentation)
Grad Student Panel 4:30pm - 5:15pm					
Reception at 5:30pm in Grad Commons by Valhalla					