

# Southern Regional Algebra Conference 2017

Mobile, March 17 – 19, 2017  
Schedule of Talks

- Registration will be available in the Humanities building, starting at 12 Noon.

1:15 PM	<b>Welcome</b>	Humb 170
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Friday	HUMB 170	HUMB 150
1:30 PM	<b>Tin-Yau Tam</b> Hyperbolic Geometry and Geometric Mean of Positive Definite Matrices	<b>Mark Lewis</b> Ultraspecial $p$ -Groups
2:00 PM	<b>Daryl Granario</b> Ballantine's Theorem on $\mathrm{Sp}(2n, \mathbb{C})$	<b>Kodithuwakku Indika</b> Symmetry Classes and the Idempotent Property of a Symmetrizer
2:30 PM	<b>Zhuo-Heng He</b> The Complete Equivalence Canonical Form of Four Matrices over an Arbitrary Division Ring	<b>Matthew Ragland</b> Alternate Proof to Derek Robinson's 1968 Local Characterization Theorem on $T$ -Groups
3:00 PM	<b>Jianzhen Liu</b> Star-Shapedness and Adjoint Orbits Associated with Semisimple Lie Algebras	<b>Christopher Cyr</b> Nilpotent Subgroups and Semipermutability in some Simple Groups

3:30 PM	<b>Coffee Break</b>	
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Friday	HUMB 170	HUMB 150
4:00 PM	<b>Ulrich Albrecht</b> Valuated Baer-Groups	<b>Irfan Bagci</b> Weyl Modules and Weyl Functors for Lie Superalgebras
4:30 PM	<b>Daniel Herden</b> More on Local Automorphisms of $\mathrm{FI}(P)$ 's	<b>Nham Ngo</b> Rational Singularities of $G$ -Saturation
5:00 PM	<b>Richard LeBlanc</b> $\mathrm{FI}$ -Extending Hulls of Abelian Groups	<b>Piyush Shroff</b> Relationship between Color Lie Algebras and Quantum Drinfeld Orbifold Algebras
5:30 PM	<b>Gary Birkenmeier</b> A Description of Indecomposable Quasi-Frobenius Rings	<b>Lauren Grimley</b> Group Extensions of Quantum Exterior Algebras

6:30 PM	<b>Dinner</b> The Student Center (SC) Terrace	
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Saturday	HUMB 170	HUMB 150
8:30 AM	<b>Paul-Hermann Zieschang</b> A Survey on Hypergroups	<b>Michael Joyce</b> Combinatorial Models for Complete Quadrics
9:00 AM	<b>Andrew Wang</b> An Alternative to the Exchange Condition in Coxeter Hypergroups	<b>Mahir Can</b> Geometry and Structure of Spherical Double Cones
9:30 AM	<b>Yong Yang</b> On $p$ -Parts of Character Degrees	<b>Selvi Beyarslan</b> Regularity of Powers of Unicyclic Graphs
10:00 AM	<b>Joshua Maglione</b> Computing New Isomorphism Invariants of Groups	<b>Tianran Chen</b> The Root Counting Problem – Tropical Connections

10:30 AM	<b>Coffee Break</b>	
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11:00 AM	<b>Klaus Lux</b>	Basic Algorithms in the Representation Theory of Groups and Algebras
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12:00 PM	<b>Lunch Break</b>	
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13:30 AM	<b>Jon Carlson</b>	Computing with Matrix and Basic Algebras
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Saturday	HUMB 170	HUMB 150
2:30 PM	<b>Leonard Scott</b> Computing Individual Kazhdan-Lusztig Basis Elements	<b>Jimmy Dillies</b> Example of an Automorphism of a K3 Surface
3:00 PM	<b>John Perry</b> A Dynamic Buchberger Algorithm	<b>Enkeleida Lakuriqi</b> Using Mirrors to Predict Symmetry

3:30 PM	<b>Coffee Break</b>	
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Saturday	HUMB 170	HUMB 150
4:00 PM	<b>Christopher Drupieski</b> Some $\mathbb{Z}/2\mathbb{Z}$ -Graded Analogues of One-Parameter Subgroups and Applications to the Cohomology of $GL_{m n}(r)$	<b>Tony Se</b> The Cohen-Macaulay Property of Affine Semigroup Rings in Dimension 2
4:30 PM	<b>Elena Poletaeva</b> On Finite $W$ -Algebras for Lie Algebras and Superalgebras in the Non-Regular Case	<b>Basanti Poudyal</b> Existence of Totally Reflexive Modules in the Absence of Exact Zero Divisors
5:00 PM	<b>Jason Elsinger</b> Representations of Lattice Vertex Algebras, Trace Functions, and Modular Transformations	<b>Enoch Lee</b> On Right Intrinsic Ring Extensions

Saturday	HUMB 170	HUMB 150
5:30 PM	<b>Young Jo Kwak</b> Automorphisms of the Lie Algebra $\mathfrak{so}(n, \mathbb{K})$ that cannot be seen	

6:30 PM	<b>Barbecue Dinner</b> The Faculty Club	
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Sunday	HUMB 170	HUMB 150
8:30 AM	<b>Anthony Giovannitti</b> Quasi-Representing Graphs of Partially Ordered Sets	<b>Huajun Huang</b> Upper Triangular Similarity of Upper Triangular Matrices
9:00 AM	<b>Mark Greer</b> Going to Loops from Groups through Baer	<b>Wei Gao</b> Tree Sign Patterns that Require $\mathbb{H}_n$
9:30 AM	<b>Zekeriya Karatas</b> Metaquasihamiltonian Groups of Infinite Rank	<b>Bach Nguyen</b> Noncommutative Discriminants: Applica- tions and Recent Progress
10:00 AM	<b>Venkata Pantangi</b> Smith and Critical Groups of some Graphs Arising from Rank 3 Permutation Groups	<b>Kurt Trampel</b> Computing Noncommutative Discriminants via Poisson Primes

10:30 AM	<b>Coffee Break</b>	
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Sunday	HUMB 170	HUMB 150
11:00 AM	<b>Simplice Tchamna- Kouna</b> Kronecker Function Rings and Flat Epimor- phic Ring Extensions	<b>Prasad Senesi</b> The Root System of a Linear Voting Method
11:30 AM	<b>Robert Underwood</b> The Structure of Hopf Algebras Acting on Galois Extensions	<b>Trung Hoa Dinh</b> On the Characterization of Operator Mono- tone Functions
12:00 PM	<b>Pingping Zhang</b> A Further Extension of Rotfel'd Theorem	