



**SOUTHERN REGIONAL ALGEBRA  
CONFERENCE 2024**

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**University of Houston-Downtown**  
**Marilyn Davies College of Business Building**  
March 22-24, 2024  
Houston, Texas

# Southern Regional Algebra Conference 2024

University of Houston-Downtown, Houston, Texas

Marilyn Davies College of Business Building

## Schedule, Friday, March 22, 2024

**12:00 -12:30 Room SSB-108, Check-in, conference formalities, parking**

**12:30-12:50 Room SSB-113: Opening remarks**

**Session chair: Kent Neuerburg**

**1:00-1:25 Room SSB-113:** Kenneth L. Price

**Affiliation:** University of Wisconsin Oshkosh

**Title:** Enhancing Lie color algebras

**1:30-1:55 Room SSB-113:** Guy Biyogmam

**Affiliation:** Georgia College & State University

**Title:** On the dimension of the Schur Lie-multiplier of Leibniz  $n$ -algebras

**2:00-2:25 Room SSB-113:** Olivier A. Heubo Kwegna

**Affiliation:** Saginaw Valley State University

**Title:** Localizations of  $*$ - completely integrally closed domains

**2:30-3:00 Room SSB-108: Coffee break**

**Session chair: Oliver A. Heubo-Kwegna**

**3:00-3:25 Room SSB-113:** Christopher (C.J.) Bott

**Affiliation:** Texas A&M University

**Title:** SchubertIdeals.m2: A software package for the Schubert calculus of flag varieties

**3:30-3:55 Room SSB-113:** Layla Sorkatti

**Affiliation:** Southern Illinois University

**Title:** On minimal symplectic alternating algebras

**4:00-5:30 Break: Visit a place nearby or walk downtown**

**5:30-7:30 Room: SSB-343: Dinner #1**

## Schedule, Saturday, March 23, 2024

**7:30-7:55: Room SSB-108: Coffee, light breakfast**

**Session chair: Jean B Nganou**

**8:00-8:50 Room SSB-113:** Tekin Karadag

**Affiliation:** University of Georgia

**Title:** Lie structure by homotopy lifting

### **Parallel Session I: Room SSB-113**

**Session chair: Mark Colarusso**

**9:00-9:25 Room SSB-113:** Luigi Ferraro

**Affiliation:** University of Texas, Rio Grande Valley

**Title:** Trimming five generated Gorenstein ideals

**9:30-9:55 Room SSB-113:** Arik Wilbert

**Affiliation:** University of South Alabama

**Title:** Delta Springer varieties and arc algebras

**10:00-10:30 Room SSB-108: Coffee break**

**Session chair: Justin Lynd**

**10:30-10:55 Room SSB-113:** Mark Colarusso

**Affiliation:** University of South Alabama

**Title:**  $GL(n)$ -orbits on two complete flag varieties and a line

**11:00-11:25 Room SSB-113:** Irfan Bagci

**Affiliation:** University of North Georgia

**Title:** Whittaker modules for cartan type Lie superalgebras

**11:30-1:00: Lunch break**

**Session chair: Simplicie Tchamna**

**1:00-1:25 Room SSB-113:** Sergey Grigorian

**Affiliation:** University of Texas Rio Grande Valley

**Title:** Algebraic structures on parallelizable manifolds

**1:30-1:55 Room SSB-113:** Benjamin Roark

**Affiliation:** Coe College

**Title:** Counting cycles in Tanner graphs of low-density parity check codes

**2:00-2:25 Room SSB-113:** Lokendra Paudel

**Affiliation:** University of South Carolina Salkehatchie

**Title:** On Star-Prüfer extensions

**2:30-3:00 Room SSB-108: Coffee break**

**Session chair: Guy Biyogmam**

**3:00-3:25 Room SSB-113:** Simplice Tchamna

**Affiliation:** Georgia College

**Title:** A study of Generalized Star-GCD Extensions

**3:30-3:55 Room SSB-113:** Ayman Badawi

**Affiliation:** American University of Sharjah

**Title:** Square-difference factor absorbing ideals of a commutative ring

**Parallel Session II: Room SSB-119**

**Session chair: Cornelius Pillen**

**9:00-9:25 Room SSB-119:** Justin Lynd

**Affiliation:** University of Louisiana at Lafayette

**Title:** Partial groups as symmetric sets

**9:30-9:55 Room SSB-119:** Sudhir Ghorpade

**Affiliation:** Indian Institute of Technology Bombay

**Title:** Hyperplane sections of determinantal varieties over finite fields

**10:00-10:30 Room SSB-108: Coffee break**

**Session chair: Alan Cannon**

**10:30-10:55 Room SSB-119:** Jared Painter

**Affiliation:** University of North Alabama

**Title:** Maximal type Koszul algebra structures for trivariate monomial ideals

**11:00-11:25 Room SSB-119:** Kalina Mincheva

**Affiliation:** Tulane University

**Title:** (Equivariant) vector bundles on tropical toric schemes

**11:30-1:00 Lunch break**

**Session chair: Mahir Bilen Can**

**1:00-1:25 Room SSB-119:** Ozlem Ugurlu

**Affiliation:** Saint Louis University

**Title:** Understanding Hessenberg varieties through K-orbit closures

**1:30-1:55 Room SSB-119:** Alan Cannon

**Affiliation:** Southeastern Louisiana University

**Title:** Nearrings of functions determined by subgroups

**2:00-2:25 Room SSB-119:** Cornelius Pillen

**Affiliation:** University of South Alabama

**Title:** Tilting Modules for type A

**2:30-3:00 Room SSB-108: Coffee break**

**4:00-5:30 Break (Walk around the Bayou?)**

**5:30-7:30 Room SSB-343: Dinner #2**

## Schedule, Sunday, March 24, 2024

**7:30-7:55 Room SSB-108: Coffee, light breakfast**

**Session chair: Jean B Nganou**

**8:00-8:50 Room SSB-113:** Mahir Bilen Can

**Affiliation:** Tulane University

**Title:** Classical groups over finite fields and error correcting codes

**9:00-9:25 Room SSB-113:** Naufil Sakran

**Affiliation:** Tulane University

**Title:** Classification of irreducible unipotent numerical monoids

**9:30-9:55 Room SSB-108: Coffee break**

**Session chair: Lokendra Paudel**

**10:00-10:25 Room SSB-113:** Jean Nganou

**Affiliation:** University of Houston-Downtown

**Title:** On generalized Lukasiewicz rings

**11:00-12:00 Final remarks and Planning meeting**

**12:00 Adjourn.**