



DEPARTMENT OF
MATHEMATICS
Illinois State University

ISU Algebra Seminar

Date and Time: November 17, 2022, from 1:00 pm to 1:50 pm.

Speaker: Cesiley Barnes (ISU), Emma Martin (ISU), and Josalyn Service (ISU)

Title: Classification of Vertex A-algebroids B when B are 3-dimensional non-Lie solvable left Leibniz algebras

Abstract: Vertex algebroids were introduced in 1999 by Gorbounov, Malikov, and Schechtman. This rich and complex algebraic object has a strong connection with representation theory of vertex algebras and Leibniz algebras. Up to now, the classification of vertex algebroids is far from being completed. In this talk, we will discuss the classification of vertex A-algebroids B when B are 3-dimensional, non-Lie, non-cyclic left Leibniz algebras.

This talk is based on our summer 2022 research project that was supported by FIREbird Fellowships and supervised by Dr. Yamskulna.

About Speakers: Cesiley Barnes is a 4th year pure mathematics student; Emma Martins is a 3rd year student who is in accelerate program; Josalyn Service is a 3rd year student who is in Mathematics Teacher Education program. Cesiley, Emma, and Josalyn met in MAT 175 class in Fall 2020 and began their research journey together since Spring 2021. Since then, they have been investigating and classifying vertex algebroids. Their work on classification of vertex algebroids associated with cyclic Leibniz algebras was presented at the Undergraduate Research Symposium in Spring 2021.

Zoom Meeting Information

Zoom Room ID: 948 5899 6931

Passcode: ISU

Zoom Room Link: <https://illinoisstate.zoom.us/j/94858996931>