

Department of Mathematics and Statistics

## **Colloquium Series**



## Mathematical Creativity:

A Way for Teachers and Students to Feel Empowered

## Prof. Milos Savic University of Oklahoma

Abstract: As a graduate student in mathematics, after passing all of my qualifying exams, I was asked to select a topic of research. After my selection, my advisor (at the time) told me that I was to create a new result or theorem in this topic. My first thought was, "Me?? How??" I refused to believe I could contribute anything new to the field; I never felt empowered to create new math. As part of the Creativity Research Group, I would like to talk about some preliminary results from our recently funded National Science Foundation grant on mathematical creativity in calculus. Our main conjecture was that by teachers valuing mathematical creativity in

the class, students' identity would be reshaped. The talk will be centered around students and instructors that participated in Spring 2019 in Calculus I. I would like to frame the discussion of our results around mathematical power and freedom, two aspects of identity. During the talk, there will be interactive moments, and all are welcome to participate and converse. We might leave the talk with more questions than answers!

**Keywords:** mathematical creativity, mathematical power, qualitative research.

Tuesday November 5th, 12:05 - 12:50pm in 3-1616