Talk Math 2 Me

(A mathematics seminar for students and by students)

Undergraduate Math Major, **Hunter Richardson** will speak on:

Introduction to Galois Fields and a look into Cryptography

Friday November 11, 2022
DERR 113
12:00pm-1:00pm

Abstract

Galois fields are a cornerstone for understanding any cryptography. In this talk, I will introduce Galois fields or also called Finite fields, how they work, and why they are so useful for computer arithmetic. We will then discuss the two most crucial properties of a Galois field, talking about both prime fields and extension fields. Ultimately, we will talk about how this helped create one of the most popular cryptography standards, Advanced Encryption Standard (AES). This talk will go into modern algebra topics, but just knowledge of modular arithmetic is needed.

For details about Talk Math 2 Me, email Ellen Couvillion (ebr21@txstate.edu) or visit: