

ISU ALGEBRA SEMINAR



FALL 2017 SCHEDULE

Thursdays, 12:00 PM-12:50 PM in Williams Hall, room 21

November 30, 2017

Speakers: Shelby Bush and Matthew Speck

Talk title: Counting Mathieu-Zhao Subspaces of $(\mathbb{F}_p)^n$

Abstract: A Mathieu-Zhao subspace of a ring is a generalization of an ideal. It was introduced by Wenhua Zhao in relation to the Jacobian Conjecture. To better understand these subspaces, we study them in the ring $(\mathbb{F}_p)^n$. In particular, we count the total number of Mathieu-Zhao subspaces of $(\mathbb{F}_p)^n$ for small values of n . We demonstrate that even for small values of n this counting becomes quite difficult, and we provide useful methods moving forward.