

COLLOQUIUM

Speaker: Dr. Jason Gaddis, Miami University

Title: Auslander's Theorem for permutation actions on noncommutative algebras

Date: Friday, March 30, 2018

Room/Time: Meet-and-Greet: 2:30 p.m. Room 222 MM
Talk: 3:00 p.m. Room 224 MM

ABSTRACT:

Let G be a small finite group acting linearly on a polynomial ring A over the complex numbers. A famous theorem of Auslander asserts that the skew group algebra $A \# G$ is isomorphic to the algebra of endomorphisms of A over the fixed ring of A by G . This result is intimately connected to the McKay correspondence and the study of graded isolated singularities. In this talk, I will introduce the field of noncommutative invariant theory, the history of Auslander's theorem, and my own work on extending the results of the theorem to permutation actions on certain noncommutative algebras.

SPEAKER BIO:

Jason Gaddis is an Assistant Professor at Miami University specializing in noncommutative algebra and noncommutative invariant theory. He taught high school math in Baltimore, Maryland before earning his PhD at the University of Wisconsin-Milwaukee. Prior to joining the faculty at Miami, he was a Teacher-Scholar Postdoctoral Fellow at Wake Forest University.