

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Daniele Rosso
Indiana University Northwest



Date: Wednesday, April 24, 2019

Time: 3:00 PM

Location: 258 Hurley Hall

Lecture Title:

Twisted generalized Weyl algebras over polynomial rings

Abstract

Twisted generalized Weyl algebras (TGWAs) are a family of algebras that includes as special cases a lot of algebras of interest in representation theory. They are defined by generators and relations starting from a base ring R and the choice of an n -tuple of elements in the center of R , together with an n -tuple of commuting automorphisms of R , that have to satisfy certain consistency equations. I will explain how to classify TGWAs, up to graded isomorphism, in the case where R is a polynomial ring over a field of characteristic zero. This is joint work with Jonas Hartwig.