

1128-14-128

Adam Nyman* (adam.nyman@wwu.edu). *Genus zero phenomena in noncommutative algebraic geometry.*

The notion of noncommutative \mathbb{P}^1 -bundle was discovered and studied by M. Van den Bergh. Examples include noncommutative ruled surfaces, noncommutative Del Pezzo surfaces, and noncommutative curves of genus zero. In this talk we describe necessary and sufficient conditions for an abelian category to be equivalent to a noncommutative \mathbb{P}^1 -bundle over a pair of division rings. As a consequence, we show Piontkovski's nonnoetherian noncommutative projective lines are noncommutative \mathbb{P}^1 -bundles. (Received February 21, 2017)