

Meeting: 1004, Bowling Green, Kentucky, SS 15A, Special Session on Recent Advances in Noncommutative Algebra

1004-16-198 **K. Retert*** (retert@udallas.edu), University of Dallas, 1845 E. Northgate Drive, Irving, TX 75062. *I-algebras and Curve Categories.*

One important result in algebraic geometry is Serre's Theorem, which establishes a correspondence between varieties and commutative, graded algebras. The categorical aspect of this interconnection provides an extremely useful approach to noncommutative algebraic geometry: examining algebras and categories by means of the interrelation between categories and not necessarily commutative algebras. In extending the correlation to curves on a variety, I-algebras, a specific type of graded algebras, are crucial. This talk will discuss one way in which I-algebras and their associated module categories fit into this viewpoint, especially in the context of curve categories. (Received January 24, 2005)