

ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR

Speaker: Michael Brown
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Date: Thursday, February 27, 2020

Time: 3:00 PM

Location: 258 Hurley Hall

Lecture Title:

Standard Conjecture D for matrix factorizations

Abstract

In 1968, Grothendieck posed a family of conjectures concerning algebraic cycles called the Standard Conjectures. They have been proven in some special cases, but they remain open in general. In 2011, Marcolli-Tabuada realized two of these conjectures as special cases of more general statements, involving differential graded categories, which they call Noncommutative Standard Conjectures C and D. The goal of this talk is to discuss a proof, joint with Mark Walker, of Noncommutative Standard Conjecture D in a special case which does not fall under the purview of Grothendieck's original conjectures: namely, in the setting of matrix factorizations.