
MATTHEW SATRIANO, University of Waterloo

Noncommutative surfaces and stacky surfaces

Understanding the extent to which noncommutative objects are determined by commutative ones is an important theme in noncommutative geometry, and is an underlying principle of the noncommutative McKay correspondence. We prove that there is a dictionary between noncommutative surfaces and smooth stacky surfaces which gives equivalences on the level of derived categories. This is joint work with Eleonore Faber, Colin Ingalls, and Shinnosuke Okawa.