Stanford Algebraic Geometry Seminar

THE MCKAY CORRESPONDENCE: MOTIVIC INTEGRATION AND DERIVED CATEGORIES

ALASTAIR CRAW
Utah

Abstract

By associating a graph to each finite subgroup G of $SL(2, \mathbb{C})$, John McKay uncovered a beautiful link between representations of G and geometrical properties of the minimal resolution of the quotient $\mathbb{C}^2/G$. I'll discuss two generalisations of this result to higher dimensions: Kontsevich's theory of motivic integration, and the Fourier-Mukai transform approach of Bridgeland, King and Reid. If time permits I'll discuss recent work on finding a link between the two approaches.

Friday, May 2
3:30 p.m.
Room 383-N

http://math.stanford.edu/~vakil/seminar0203/