

Algebraic K-Theory Seminar

Arithmetic B-fields and derived equivalences of twisted K3 surfaces

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Abstract: Classically, a B-field is a certain rational cohomology class associated to a Brauer class on a variety. Applications include Huybrechts and Stellari's derived Torelli theorem for twisted K3 surfaces over the complex numbers. An analog in ℓ -adic cohomology was introduced by Lieblich, Maulik, and Snowden, who gave applications to the Tate conjecture for K3 surfaces. We will describe the crystalline realization of this construction, and give some applications to the derived categories of twisted K3 surfaces in positive characteristic.

Wednesday, October 10 at 3:00 PM in 1227 SEO