

7/17 [Takehiko Yasuda] The motivic McKay correspondence in arbitrary characteristics

I will speak about a recent result of mine, which has been the main conjecture in the field for years. In characteristic zero, the McKay correspondence in terms of motivic invariants is formulated as the equality of the stringy motive of the quotient variety in question and some finite sum of powers of L in a version of the complete Grothendieck ring of varieties which is taken over conjugacy classes of the given finite group. In generalization to arbitrary characteristic, the finite sum is replaced with a motivic integral over the moduli space of G -torsors over the punctured formal disk. I also talk about an application to singularities.