

Young Researchers

A Refinement of Voevodsky's Nilpotence Conjecture

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Vladimir Voevodsky conjectured in the 90's that the nilpotence and the numerical equivalence relations on algebraic cycles agree. This conjecture was proved by Bernardara-Marcolli-Tabuada for certain quadric fibrations, intersections of quadrics, linear sections of Grassmannians, linear sections of determinantal varieties, and Moishezon manifolds, and later by Ornaghi-Pertusi for certain cubic fourfolds and Gushel-Mukai fourfolds. In this talk we present a refinement of these results by using the algebraic equivalence relation instead of the nilpotence equivalence relation.