

Duality in motivic homotopy theory

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Abstract

Let k be a perfect field. Using base change properties for motivic stable homotopy categories, one can show that every smooth projective k -scheme is dualizable. Hence if k is a field of characteristic zero, the motivic stable homotopy category of k is generated by dualizable objects. This implies that, for fields of characteristic zero, modules over the motivic cohomology ring spectrum model the derived category of motives.