Karoubi's construction for motivic cohomology operations

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Abstract

We use an analogue of Karoubi's construction in the motivic situation to give some cohomology operations in motivic cohomology. We prove many properties of these operations, and we show that they coincide, up to some nonzero constants, with the reduced power operations in motivic cohomology originally constructed by Voevodsky. The relation of our construction to Voevodsky's is, roughly speaking, that of a fixed point set to its associated homotopy fixed point set.