

CONNER-FLOYD ISOMORPHISM FOR ALGEBRAIC K-THEORY
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In joint work with Toni Annala and Marc Hoyois, we formulate and prove a Conner-Floyd isomorphism for algebraic K-theory of an arbitrary qcqs derived scheme. Since algebraic K-theory is not \mathbb{A}^1 -homotopy invariant in general, we cannot employ \mathbb{A}^1 -homotopy theory to study it. Instead, we use “P-homotopy”, which is a twisted form of \mathbb{P}^1 -homotopy. We construct a motive-theoretic category in which P-homotopy invariance holds and every reasonable cohomology theory, including algebraic K-theory, is representable. In this talk, I will explain our P-homotopical method and its application to Conner-Floyd isomorphism.