

The real additivity theorem

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The classical additivity theorem states that, to the eyes of algebraic K-theory, the world looks semi-simple. The theorem of the title is the analogous result for real algebraic K-theory, which is related to algebraic K-theory as Atiyah's real K-theory is related to (topological) K-theory. In this talk, I will recall the very elegant proof of the additivity theorem by McCarthy and explain how Ib Madsen and myself have modified this proof to prove the real additivity theorem. Time permitting, I will explain some consequences of this theorem for real algebraic K-theory.