Speaker (Konuşmacı)

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Title (Başlık)

Maximal Exact Structures on Additive Categories

Abstract (Özet)

Quillen exact categories have recently reappeared into the mainstream due to some new applications to algebraic K-theory, model structures, approximation theory or functional analysis. They provide a suitable setting for developing homological algebra beyond abelian categories, as is often the case in the above settings.

Every additive category has an obvious smallest exact structure given by the split exact sequences. It is natural to wonder whether there exists, and then which is, the greatest exact structure on an arbitrary additive category. We review known results for preabelian, weakly idempotent complete and additive categories, and we present some steps towards its description.