

Conservative geometric functors via purity

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A tensor-triangulated (tt) functor f between rigidly-compactly generated tt-categories is called geometric if it preserves small coproducts. Such functors serve as auxiliary tools for understanding geometric properties of the source via those of the target. A particularly desired property of a geometric functor is conservativity. This property has strong consequences at the level of triangular spectra. We establish a criterion for determining when a family of geometric functors is jointly conservative through the lens of purity in compactly generated triangulated categories. We apply it to two particular situations involving sequential limits of ring spectra. This is joint work with Juan Omar Gómez.