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Title: Title: On the Chromatic Localization of K-Theory

Abstract: To a ring spectrum R, one associates its K-theory spectrum K(R), the universal recipient of an additive invariant of perfect R-modules. The spectra R and K(R) can be studied through the layers of their chromatic filtrations. When R is T(n)-local (so concentrated in single chromatic height), the vanishing and purity results of Clausen-Land-Mathew-Meier-Naumann-Noel-Tamme demonstrate that the main localizations of K(R) of interest are the T(n)- and T(n+1)-localizations; the higher localizations vanish, and the lower depend only on a further localization of R.

In my talk, I will present a work in progress, joint with Ben-Moshe, Schlank, and Yanovski, on some structural properties of the T(n+1)-localized K-theory of T(n)-local rings and categories. Specifically, I will discuss a generalization of the descent result of Clausen-Mathew-Naumann-Noel from finite p-group actions to actions of (suitably finite) p-group objects in spaces. I will also discuss the compatibility of this localized K-theory with the chromatic cyclotomic and Fourier theories developed in previous joint works with Barthel, Schlank, and Yanovski.