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**BEN ANTIEAU**, UIC

*Negative and homotopy  $K$ -theory of ring spectra and extensions of the theorem of the heart*

Barwick proved that the  $K$ -theory of a stable infinity-category with a bounded  $t$ -structure agrees with the  $K$ -theory of its heart in non-negative degrees. Joint work with David Gepner and Jeremiah Heller extends this to an equivalence of nonconnective  $K$ -theory spectra when the heart satisfies certain finiteness conditions such as noetherianity. Applications to negative  $K$ -theory and homotopy  $K$ -theory of ring spectra are provided, which were the original motivation for our work.