In influential work of the 70s and 80s, Segal and Waldhausen each construct a version of K-theory that produces spectra from certain types of categories. These constructions agree, in the sense that appropriately equivalent categories yield weakly equivalent spectra. In the 2000s, work of Elmendorf–Mandell and Blumberg–Mandell produced more structured versions of Segal and Waldhausen K-theory, respectively. These versions are "multiplicative," in the sense that appropriate notions of pairings of categories yield multiplication-type structure on their resulting spectra. In this talk, I will discuss joint work with Osorno in which we show that these constructions agree as multiplicative versions of K-theory. Consequently, we get comparisons of rings spectra built from these two constructions. Furthermore, the same result also allows for comparisons of related constructions of spectrally-enriched categories.

There will be a pretalk at 3pm.

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