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Sarah A Yeakel* (yeakel2@illinois.edu). *Classifying n -excisive functors by generic representations.*

In the calculus of functors, Goodwillie has given a way to approximate a functor with a Taylor tower of polynomial functors. Kuhn classified degree n functors of vector spaces by modules over matrix rings, which he calls generic representations. This result was generalized by McCarthy for endofunctors of module spectra, and we will discuss a further generalization of Kuhn's result to n -excisive functors from nice simplicial model categories to spaces or spectra. Motivated by Bökstedt's construction for THH, we use a slight modification to Goodwillie's construction of the n -th Taylor polynomial that admits the extra structure needed to obtain the result. (Received August 23, 2014)