1125-55-2149 Sarah Yeakel* (syeakel@math.umd.edu). Derivatives in Goodwillie Calculus.

Goodwillie's calculus of functors is a method of approximating a homotopy functor with easier "polynomial" functors, building a Taylor tower where the homogeneous pieces are classified by certain spectra, called the derivatives of the functor. It is known that the derivatives of the identity functor of spaces form an operad and composable functors have a chain rule. We will talk about some extra structure that the derivatives possess and extensions to other settings. (Received September 19, 2016)