

1096-55-2298

Justin Noel*, justin@nullplug.org. *Moduli spaces of algebra structures*. Preliminary report.

To construct a homotopy coherent multiplication one can inductively construct partial multiplications, called A_n -structures, via obstruction theory. We generalize Angeltveit's work on this obstruction theory for the A_∞ -operad to symmetric operads such as the E_∞ -operad. More precisely, we construct an obstruction-theoretic spectral sequence computing the homotopy groups of the moduli space of algebra structures (in the ∞ -categorical sense) on a space. This work depends on a theory of generalized topological Reedy categories, which the author is developing with Moritz Groth. (Received September 17, 2013)