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„Parametrized and equivariant higher algebra“

Abstract:

In this talk, I will explain how to generalize Lurie's theory of  $\infty$ -operads so as to effectively work with the novel multiplicative and operadic structures that arise in the context of equivariant homotopy theory for a finite group  $G$ . Roughly speaking, such structures arise because one may consider tensor products indexed by finite sets  $U$  with a non-trivial  $G$ -action, and correspondingly our basic idea is to incorporate operations of any  $U$ -arity into the foundations of the theory of equivariant  $\infty$ -operads.

More generally, one has a robust theory of parametrized  $\infty$ -operads over any base category that resembles the orbit category. This is joint work with Denis Nardin.