

Rectification of operadic left fibrations

jeudi 24 octobre 2024 15:30 (55 minutes)

By a result of Heuts-Moerdijk, the ∞ -category of simplicial diagrams on the nerve of a discrete category A is equivalent to that of left fibrations over the nerve of A . This is an instance of the well known Grothendieck-Lurie straightening-unstraightening theorem.

In this talk, we will explain how one can generalize this result to the operadic case. More specifically, by working with the dendroidal formalism we show how, given any discrete operad P , one can functorially rectify an operadic left fibration over the dendroidal nerve of P and obtain a simplicial algebra on P . After explaining how this extends an analogous functor for categories, we prove that it establishes an adjunction of ∞ -categories between operadic left fibrations over the nerve of P and simplicial P -algebras. It is a work in progress that it establishes an equivalence of ∞ -categories, which would be a first step towards operadic straightening-unstraightening!

If time permits, we will conclude the exposition by presenting possible future applications.

Orateur: PRATALI, Francesca (Université Sorbonne Paris Nord)