

Axioms for higher category theory

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Abstract

Higher category theory is increasingly being developed and applied using informal language that is intrinsically homotopical and model-independent. In this talk I will explain a way of expressing this practice inside of HoTT together with a collection of axioms describing the wild $(\infty,1)$ -category of small $(\infty,1)$ -categories. We circumvent the complexities of directed type theory and multimodal type theory by interpreting types as spaces rather than categories. The collection of axioms is otherwise similar to that recently introduced by Cisinski, Cnossen, Nguyen, and Walde.