

On the ∞ -topos semantics of homotopy type theory

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Many introductions to homotopy type theory and the univalence axiom neglect to explain what any of it means, glossing over the semantics of this new formal system in traditional set-based foundations. This series of talks will attempt to survey the state of the art, first presenting Voevodsky's simplicial model of univalent foundations and then touring Shulman's vast generalization, which provides an interpretation of homotopy type theory with strict univalent universes in any ∞ -topos. As we will explain, this achievement was the product of a community effort to abstract and streamline the original arguments as well as develop new lines of reasoning.