

# TITLE: MODELS, INTERPRETATIONS AND THE INITIALITY CONJECTURES

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ABSTRACT. Work on proving consistency of the intensional Martin-Löf type theory with a sequence of univalent universes (“MLTT+UA”) led to the understanding that in type theory we do not know how to construct an interpretation of syntax from a model of inference rules. That is, we now have the concept of a model of inference rules and the concept of an interpretation of the syntax and a conjecture that implies that the former always defines the latter. This conjecture, stated as the statement that the term model is an initial object in the category of all models of a given kind, is called the Initiality Conjecture. In my talk I will outline the various parts of this new vision of the theory of syntax and semantics of dependent type theories.

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