WHAT MIGHT PHILOSOPHY MAKE OF HOMOTOPY TYPE THEORY?

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Homotopy type theory has been proposed as a new foundational language for mathematics, one better designed than set theory to represent the structures of contemporary mathematics. In contrast to the standard set theoretic picture where axioms are formalised in the framework of first-order logic, homotopy type theory suggests that we see this logic not as in any way prior, but rather as a projection or truncation of something more fundamental. In this talk I will explain these and other reasons philosophers might have for paying close attention to this new foundational language.

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