Homotopy Canonicity

Because of the univalence and function extensionality axioms, homotopy type theory does not enjoy canonicity, a property expected from a constructive type theory. Voevodsky's 'homotopy canonicity' conjecture states that a homotopical version of this property still holds: every closed element of the natural number type is homotopic to a numeral. So far, this was known only for 1-truncated homotopy type theory, shown by Shulman using Artin glueing along a groupoid-valued global sections functor. In this talk, I will present a full proof of homotopy canonicity.

This is joint work with **Krzysztof Kapulkin**.