# Introduction

A new connection has recently come to light between Logic and Topology, namely an interpretation of the constructive type theory of Martin-Löf into homotopy theory.

1. Homotopy can be used as a tool to construct models of systems of logic.
2. Constructive type theory can be used as a formal calculus to reason about homotopy.
3. The computational implementation of type theory allows computer verified proofs in homotopy theory.
4. The homotopy interpretation suggests new logical constructions and axioms.
5. Voevodsky's *Univalent Foundations* program combines these aspects into a new program of foundations for mathematics.