

Homotopy types of curves

Abstract:

Algebraic varieties are fairly rigid objects, being locally defined as zero sets of polynomials. The Morel-Voevodsky theory of homotopies parametrized by the affine line allows a more flexible view on algebraic varieties and has been a source for various important results, for example in the theory of quadratic forms and algebraic K-theory. In my talk, I will discuss in elementary terms how curves (one-dimensional algebraic varieties) can be assembled from simpler pieces up to homotopy.

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