

1. Introduction to motivic cohomology and algebraic K-theory
2. Motivic cohomology of curves and varieties over a finite field.

Abstract:

1. We give some definitions of algebraic K-theory and some definitions of motivic cohomology groups. We discuss some conjectures, known results, and some basic properties needed for the computation in the case of varieties over finite fields.

2. We concentrate on the computation of motivic cohomology of curves over finite fields. We will give an outline of proof, using some known strong results. We then discuss some of my results (joint with Seidai Yasuda) on the computation of motivic cohomology and K-theory of some higher dimensional varieties over a finite field.

REFERENCES

- [1] Weibel “Algebraic K-Theory of rings of integers in local and global fields” pp. 158–162
- [2] Kondo-Yasuda “On Two higher Chow groups of schemes over a finite field” arxiv 1306.1607, Section 2
- [3] Handbook of K-theory, available at <http://www.math.illinois.edu/K-theory/handbook/>