

Title: "Motivic cohomology and p -adic periods".

Abstract:

The theory of p -adic periods predicts a relationship between the Galois representations arising from p -adic étale cohomology of algebraic varieties over local fields and the linear structure of their de Rham cohomology. The main theorem, so called p -adic period isomorphism, allows to reconstruct the Galois representations from the linear de Rham data. We will present a proof of the p -adic period isomorphism using motivic cohomology as a link between the étale and de Rham cohomologies.