An étale view of Galois Cohomology Leiden Master thesis defense

Candidate: Sergio Zarabara

June 23^{rd} 2015

Abstract

In this talk we will present a fundamental result that draws a link between the classical Galois Cohomology theory and the Grothendieck Étale Cohomology theory. The first part we will be devoted to introduce the concepts necessary to understand the definition of étale cohomology of sheaves (as for instance the key notions of *étale morphism of schemes* and of *étale site*) and to briefly recall the definition of the Galois cohomology groups. After this we will state the main results of the thesis and we will outline the proof of a couple of them. If time permits we will also quickly show a nice application of the main theorem which leads to an "étale proof" of one of the best known results in Galois Cohomology: *Hilbert Theorem 90*.