Séminaire de théorie des nombres Le 15 février 2021 à 14h (BigBlueButton)

p-group covers of curves in characteristic p

Exposé de Jędrzej Garnek (Adam Mickiewicz University, Poland)

Résumé : Studying cohomology of a variety with an action of a finite group is a classical and well-researched topic. However, most of the results consider only the tame ramification case or concern the image of cohomology in the K-theory. During this talk we will focus on the case of a curve over a field of characteristic p with an action of a finite p-group. We will try to describe the equivariant behaviour of the Hodge-de Rham exact sequence of the curve. Our previous research suggests that terms of this sequence decompose as sums of certain 'local' and 'global' parts. We show that this is true under some mild assumptions.