
RICK JARDINE, University of Western Ontario, Dept. of Mathematics, London, ON, N6A 5B7

Pointed torsors and Galois groups

Suppose that H is an algebraic group which is defined over a field k , and let L be the algebraic closure of k . The canonical stalk for the étale topology on k induces a simplicial set map from the classifying space $B(H\text{-tors})$ of the groupoid of H -torsors (a.k.a. principal H -bundles) to the space $BH(L)$. The homotopy fibres of this map are groupoids of pointed torsors, suitably defined. These fibres can be analyzed with cocycle techniques: their path components are representations of the absolute Galois groupoid in H , and each path component is contractible. The arguments for these results are simple, and applications will be displayed.