

Michael Wibmer: Etale difference algebraic groups.

Difference algebraic groups, i.e, groups defined by algebraic difference equations occur naturally as the Galois groups of linear differential or difference equations depending on a discrete parameter. If the linear equation has a full set of algebraic solutions, the corresponding Galois group is an étale difference algebraic group. Like étale algebraic groups can be described as finite groups with a continuous action of the absolute Galois group of the base field, étale difference algebraic groups can be described as certain profinite groups with some extra structure. I will present a decomposition theorem for étale difference algebraic groups, which shows that any étale difference algebraic group can be build from étale algebraic groups and finite groups equipped with an endomorphism.