The Hopf-Schur group of a field

Juan Cuadra

Universidad de Almería

Dpto. Álgebra y Análisis Matemático

E-04120 Almería

email: jcdiaz@ual.es

Let k be a field and $Br(k)$ its Brauer group. In this talk we will introduce the Hopf-Schur group of k. It is defined to be the subgroup of $Br(k)$ consisting of those classes that may be represented by homomorphic images of Hopf algebras over k. We will present a result showing that the Hopf-Schur group may be much larger than the Schur group.