

Abstract

Matrices over Finite Fields XIV: The Dimension of the Cuspidal Representations

Irreducible representations of our group are called cuspidal if they are not constituents of an induced module of some one-dimensional representation of the Borel subgroup. Equivalently, this means that their Jacquet module vanishes. In the talk, we will prove that every cuspidal representation has dimension $q - 1$. The material discussed corresponds to Section 10 in the book by Piatetski-Shapiro.