

Suppose the finite p -group P acts via automorphisms coprimely on the finite solvable group G . This action naturally induces an action of P on the complex irreducible characters of G . There are very few results on the orbit structure of this action. One result by A. Moretó states that there always exists a "large" orbit, more precisely, an orbit whose size exceeds the 19th root of the order of P . In the talk we present strategies on how to improve this result. This is joint work in progress with Yong Yang.