

## **A refinement of the McKay conjecture**

Anton Evseev

Let  $G$  be a finite group and  $N$  be the normalizer of a Sylow  $p$ -subgroup of  $G$ . The McKay conjecture, which has been open for more than 30 years, states that  $G$  and  $N$  have the same number of irreducible characters of degree not divisible by  $p$  (i.e. of  $p'$ -degree). The conjecture has been strengthened in a number of ways. In particular, a version due to Isaacs and Navarro suggests the existence of a correspondence between irreducible character degrees of  $G$  and of  $N$  modulo  $p$  and up to sign, if one considers only characters of  $p'$ -degree. I will review these conjectures and will discuss a possible new refinement, which implies the Isaacs—Navarro conjecture.