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Sommario/riassunto

The <i>k(GV)</i> conjecture claims that the number of conjugacy classes (irreducible characters) of the semidirect product <i>GV</i> is bounded above by the order of <i>V</i>. Here <i>V</i> is a finite vector space and <i>G</i> a subgroup of <i>GL(V)</i> of order prime to that of <i>V</i>. It may be regarded as the special case of Brauer's celebrated <i>k(B)</i> problem dealing with <i>p</i>-blocks <i>B</i> of p-solvable groups (<i>p</i> a prime). Whereas Brauer's problem is still open in its generality, the <i>k(GV)</i> problem has recently been solved, completing the work of a series of aut