1. Record Nr. UNINA9910458318403321

Autore	Schmid Peter <1941->
Titolo	The solution of the k(GV) problem [[electronic resource] /] / Peter Schmid
Pubbl/distr/stampa	London, : Imperial College Press Singapore ; ; Hackensack, NJ, : Distributed by World Scientific Pub., c2007
ISBN	1-281-86946-5 9786611869465 1-86094-971-1
Descrizione fisica	1 online resource (248 p.)
Collana	ICP advanced texts in mathematics ; ; v. 4
Disciplina	515/.7223
Soggetti	Kernel functions Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 225-229) and index.
Nota di contenuto	Contents; Preface; 1. Conjugacy Classes, Characters, and Clifford Theory; 1.1 Class Functions and Characters; 1.2 Induced and Tensor-induced Modules; 1.3 Schur's Lemma; 1.4 Brauer's Permutation Lemma; 1.5 Algebraic Conjugacy; 1.6 Coprime Actions; 1.7 Invariant and Good Conjugacy Classes; 1.8 Nonstable Clifford Theory; 1.9 Stable Clifford Theory; 1.10 Good Conjugacy Classes and Extendible Characters; 2. Blocks of Characters and Brauer's k(B) Problem; 2.1 Modular Decomposition and Brauer Characters; 2.2 Cartan Invariants and Blocks; 2.3 Defect and Defect Groups; 2.4 The Brauer-Feit Theorem 2.5 Higher Decomposition Numbers, Subsections2.6 Blocks of p-Solvable Groups; 2.7 Coprime FpX-Modules; 3. The k(GV) Problem; 3.1 Preliminaries; 3.2 Transitive Linear Groups; 3.3 Subsections and Point Stabilizers; 3.4 Abelian Point Stabilizers; 4. Symplectic and Orthogonal Modules; 4.1 Self-dual Modules; 4.2 Extraspecial Groups; 4.3 Holomorphs; 4.4 Good Conjugacy Classes Once Again; 4.5 Some Weil Characters; 4.6 Symplectic and Orthogonal Modules; 5. Real Vectors; 5.1 Regular, Abelian and Real Vectors; 5.2 The Robinson{Thompson Theorem; 5.3 Search for Real Vectors; 5.4 Clifford Reduction

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