

Canonical Induction Formulae

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Brauer induction theorem says that each complex character of a finite group can be expressed as an integral combination of characters which are induced from linear characters of elementary subgroups. In the theory of Mackey functors, Boltje's theory of canonical induction supplies a criterion for some canonical induction formulas to have the vital feature of being integral. The classic examples are the canonical induction formulas for the ordinary character ring and the modular character ring. In all or almost all cases where the formula is integral, a ring structure is present, though it hasn't been used in theory. We are developing a theory of canonical induction in the general context of Green functors which are Mackey functors equipped with a multiplicative structure.