

CHARACTERIZING SEPARATING INVARIANTS

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ABSTRACT. We study separating algebras for rings of invariants of finite groups. We give an algebraic characterization for these. Furthermore, we describe a particularly nice separating subalgebra for rings of invariants of p -groups in characteristic p . This leads to a characterization of subalgebras such that their p -root and integral closure is equal to the ring of invariants. Finally, we present separating sets for invariants rings of nonmodular representations of abelian groups whose size depends only on the degree of the representation.

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