

CHARACTERISTIC AND FULLY INVARIANT SUBGROUPS OF ABELIAN P-GROUPS.

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The classification of the fully invariant subgroups of a reduced Abelian p -group is a difficult long-standing problem when one moves outside of the class of fully transitive groups; characteristic subgroups have received somewhat less attention. Here we restrict attention to the socles of fully invariant and characteristic subgroups and introduce new classes of groups which we term *socle-regular* and *strongly socle-regular*; these classes are shown to be large and strictly contains the classes of fully transitive groups and transitive groups respectively. The basic properties of such groups are investigated but it is shown that the classification of even these simplified classes of groups, seems extremely difficult. However, a surprising relationship, mirroring that between transitive and fully transitive groups, is obtained.

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