ESSENTIALLY DISTINGUISHED MODULES

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ABSTRACT

Let R be a commutative ring with identity and M be a unitary (left) R-module. In this paper we present the concepts essentially distinguished module and essentially distinguished ring as generalizations of distinguished module and distinguished ring. M is called essentially distinguished R-module provided that $ann_M(I)$ is an essential sub module of M for each maximal ideal I of R. R is called R-distinguished ring if R as an R-module is distinguished. The basic properties of such modules (rings) are studied.

KEYWORDS: Distinguished Module, Distinguished Ring, Essentially Distinguished Module, Essentially Distinguished Ring, Co Generator Ring, Principally Quasi-Injective Module