

PURELY –FULLY CANCELLATION MODULE

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ABSTRACT

Let R be a commutative ring with identity and let M be a unital R -module. We introduce the concept of purely-fully cancellation R -module.

An R -module M is called purely-fully cancellation if for every nonzero pure ideal I of R and every nonzero submodules N_1, N_2 of M such that $IN_1 = IN_2$, implies $N_1 = N_2$. We give basic properties and characterizations about this concept. Also, we give many results to study the property of purely-fully cancellation modules in the class of multiplication modules.

KEYWORDS: Purely –Fully Cancellation Module