

LIE IDEALS IN PRIME Γ -RINGS WITH DERIVATIONS

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Abstract

Let M be a 2 and 3-torsion free prime Γ -ring, d a nonzero derivation on M and U a nonzero Lie ideal of M . In this paper it is proved that U is a central Lie ideal of M if d satisfies one of the following

- (i) $d(U) \subset Z$,
- (ii) $d(U) \subset U$ and $d^2(U) = 0$,
- (iii) $d(U) \subset U$, $d^2(U) \subset Z$.

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