

SYMMETRIC LEFT BI-DERIVATIONS IN SEMIPRIME RINGS

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ABSTRACT

Let R be a 2-torsion and 3-torsion free semiprime ring. Let $D: (.,.) : R \times R \rightarrow R$ be a symmetric left bi-derivation such that the mapping $x \rightarrow [d(x), x]$ is centralizing on R , where d denotes the trace of D . Then d is commuting on R .

KEYWORDS: *Semiprime Ring, Symmetric Mapping, Trace, Derivation, Symmetric Bi-Derivation, Symmetric Left Bi-Derivation*

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