Title: Some results concerning symmetric generalized skew biderivations on prime rings

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Let R be a ring. A biadditive symmetric mapping $D : R \times R \longrightarrow R$ is called a symmetric skew biderivation if for every $x \in R$, the map $y \mapsto D(x, y)$ is a skew derivation of R (as well as for every $y \in R$, the map $x \mapsto D(x, y)$ is a skew derivation of R).

Let $D : R \times R \longrightarrow R$ be a symmetric biderivation. A biadditive symmetric mapping $\Delta : R \times R \longrightarrow R$ is said to be a symmetric generalized skew biderivation if for every $x \in R$, the map $y \mapsto \Delta(x, y)$ is a generalized skew derivation of R associated with D (as well as for every $y \in R$, the map $x \mapsto \Delta(x, y)$ is a generalized skew derivation of R associated with D).

In this paper we study some commutativity conditions for a prime ring R related to the behaviour of the trace of symmetric generalized skew biderivations of R.

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