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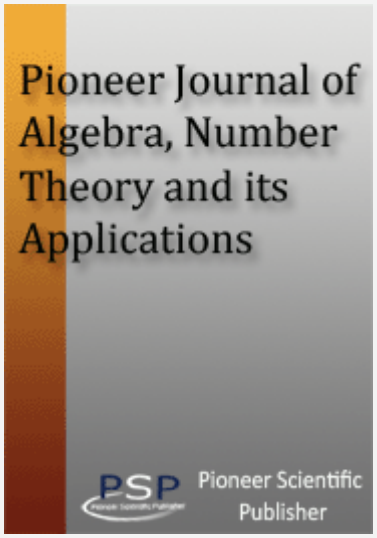

PARASTROPHS OF CENTRAL LOOPS

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Abstract

Central loop (called C-loop for short) is one of the loops of Bol-Moufang type. Any ®loop $(G, \cdot)$ which satisfies the identity $((y \cdot x) \cdot x) \cdot z = y \cdot (x \cdot (\cdot z))$, for all $x, y, z \in G$ is called a central loop. There are other equivalent identities to the above. Given a quasigroup $(G, \cdot)$, there are five other associated quasigroups called parastrophs namely, $(G, \backslash)$, $(G, *)$, $(G, \blacksquare)$, $(G, /)$ and (G, ϑ). We will show that if $(G, \cdot)$ is a central loop, then each of the parastrophs is also a central loop.

Keywords and phrases: quasigroup, loop, parastroph, centralloop.