Loops whose inner mappings are automorphisms are called automorphic loops [1].

Right-ordered automorphic loop $L$ is called Archimedean, if in $L$ the following Archimedean axiom is true: for strictly positive elements $x, y \in L$ there exists a natural number $n$ such that $x^n > y$.


We prove that right-ordered Archimedean automorphic loop is commutative and associative, and, therefore, is orderly isomorphic to a subgroup of additive group of real numbers with natural order.

References

