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A COMMON APPROACH TO DIRECTOIDS WITH AN ANTITONE INVOLUTION AND *D*-QUASIRINGS

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Abstract

We introduce the so-called DN-algebra whose axiomatic system is a common axiomatization of directoids with an antitone involution and the so-called D-quasiring. It generalizes the concept of Newman algebras (introduced by H. Dobbertin) for a common axiomatization of Boolean algebras and Boolean rings.

Keywords: directoid, antitone involution, D-quasiring, DN-algebra, a-mutation.

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