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Extensions of the Glivenko-type congruences on a Stone lattice. (English) Zbl 1401.06004
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Summary: In this paper, the notions of annulets and normal filters are introduced in Stone lattices and their properties are studied. A set of equivalent conditions is obtained to characterize normal filters of a Stone lattice. The extensions of the Glivenko-type congruences on a Stone lattice are investigated via annulets and normal filters. A description of the lattice of all extensions of the Glivenko-type congruences on a Stone lattice is given. A one-to-one correspondence between the class of all extensions and the class of all normal filters of a Stone lattice is obtained. Finally, we observe that every 2 extensions of the Glivenko-type congruences are permutable.

MSC:

06B10 Lattice ideals, congruence relations

06D15 Pseudocomplemented lattices

Cited in **1** Document

Keywords:

distributive lattices; Stone lattices; filters; annulets; normal filters; congruences; Glivenko-type congruence; congruence lattices

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