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**The lattice of algebraic closure operators on an infinite subgroup lattice.** (English)

Zbl 07409824

Commun. Algebra 49, No. 7, 2906-2915 (2021)

Summary: We say a lattice  $L$  is a subgroup lattice if there exists a group  $G$  such that  $\text{Sub}(G) \cong L$ , where  $\text{Sub}(G)$  is the lattice of subgroups of  $G$ , ordered by inclusion. We prove that the lattice of algebraic closure operators which act on the subgroup lattice of an infinite group is itself a subgroup lattice if and only if the group is isomorphic to the Prüfer  $p$ -group.

**MSC:**

06A15 Galois correspondences, closure operators (in relation to ordered sets)

20D30 Series and lattices of subgroups

**Keywords:**

closure operator; subgroup lattice

**Full Text:** DOI

**References:**

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