

1135-06-2759

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Will loops be more effective than groups as a algebraic representative for closure operator lattices?

A theorem of Birkhoff and Frink we know every algebraic lattice can be represented as a subalgebra lattice of a finite algebraic structure. In work by the presenter and Magidin we know for a finite lattice L , the generated closure operator lattice is isomorphic to the lattice of subgroups of a group if and only if L is a chain.

What about loops? As loops are groups without the associative there are many lattices which are subloop but not subgroup lattices. We will look at some preliminary finding showing many types of closure operator lattices are isomorphic to a subloop lattices. For example the closure operator lattice generated from the non-chain 4 element lattices is a subloop lattice but not a subgroup lattice. (Received September 26, 2017)