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*Lattices and semilattices having an antitone involution in every upper interval*

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**Abstract:** We study  $\vee$ -semilattices and lattices with the greatest element 1 where every interval  $[p,1]$  is a lattice with an antitone involution. We characterize these semilattices by means of an induced binary operation, the so called sectionally antitone involution. This characterization is done by means of identities, thus the classes of these semilattices or lattices form varieties. The congruence properties of these varieties are investigated.

**Keywords:** semilattice, lattice, antitone involution, congruence permutability, weak regularity

**AMS Subject Classification:** 06A12, 06C15, 06F35, 08B05, 08B10