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Aditya K Nagrath* (anagrath@du.edu), Mathematics Department, 2360 S. Gaylord St., Denver, CO. *Free Complete Extension of Distributive Lattices.*

Let L be a bounded distributive lattice. A *free complete extension of L* is a complete distributive lattice L^* such that L can be embedded as a sublattice into L^* in such a way that lattice homomorphisms of L into complete lattices can be extended to complete homomorphisms on L^* . In 1965, George W. Day proved the analogous extension for Boolean Algebras exist if and only if the Boolean Algebra is superatomic. Recall that superatomic Boolean Algebras are those that have scattered Stone spaces. In this talk, we consider bounded distributive lattices whose Priestley spaces are scattered, characterize them lattice theoretically, as well as examine the question as to whether scattered bounded distributive lattices have free complete extensions. (Received September 25, 2006)