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$\mathcal{N}$-PRIME SPECTRUM OF STONE ALMOST DISTRIBUTIVE LATTICES

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Abstract

Introduced the notions of annulets and $\mathcal{N}$-filters in stone Almost Distributive Lattices and investigated their properties. Utilized annulets to characterize the $\mathcal{N}$-filters. Derived that every proper $\mathcal{N}$-filter is the intersection of all $\mathcal{N}$-prime filters containing it and also proved that the set $\mathcal{F}_{\mathcal{N}}(L)$ of all $\mathcal{N}$-filters is isomorphic to the class $Con_E(L)$ of all G-extentions of L. Given some topological properties of the space of all $\mathcal{N}$-prime filters. Derived a necessary and sufficient condition for the space of all $\mathcal{N}$-prime filters to be a Hausdorff space.

Keywords: Almost Distributive Lattice (ADL), stone ADL, ideal, filter, annulet, $\mathcal{N}$-filters, isomorphism, compact set, Hausdorff space.

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