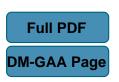
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β-PRIME SPECTRUM OF STONE ALMOST DISTRIBUTIVE LATTICES

N. Rafi¹

Department of Mathematics Bapatla Engineering College Bapatla, Andhra Pradesh, India-522 101

e-mail: rafimaths@gmail.com

AND

RAVI KUMAR BANDARU

Department of Mathematics GITAM (Deemed to be University) Hyderabad Campus, Telangana, India-502 329

e-mail: ravimaths83@gmail.com

Abstract

The notion of boosters and β -filters in stone Almost Distributive Lattices are introduced and their properties are studied, utilizing boosters to characterize the β -filters. It has been derived that every proper β -filter is the intersection of all prime β -filters containing it, and it has also been proved that the set $\mathcal{F}_{\beta}(L)$ of all β -filters is isomorphic to the set of all ideals of $\mathcal{B}_0(L)$. A set of equivalent conditions is derived for $\mathcal{B}_0(L)$ to become a relatively complemented Almost Distributive Lattice. Later, some properties of the space of all prime β -filters are derived topologically. Finally, necessary and sufficient conditions are derived for the space of all prime β -filters to be a Hausdorff space.

Keywords: Almost Distributive Lattice (ADL), stone ADL, relatively complemented ADL, ideal, filter, booster, β -filters, isomorphism, compact set, Hausdorff space.

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¹Corresponding author.

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