

WEAK RELATIVE COMPLEMENTS IN ALMOST DISTRIBUTIVE LATTICES

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Abstract

In this paper, the concept of relative complementation in almost distributive lattice is generalized. We obtain several properties on the sets of weak relative complement elements. We prove a sufficient condition for a weakly relatively complemented almost distributive lattice with dense elements to become a generalized stone almost distributive lattice.

Keywords: dense elements, relative complements, weak relative complementation, almost distributive lattice, generalized stone almost distributive lattice.

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1. INTRODUCTION

The class of distributive lattices plays a key role in the theory of lattice (Boolean algebras). Many authors generalized the concept of distributive lattice in different aspects, one of them, Swamy and Rao [8] introduced the concept of **Almost Distributive Lattice (ADL)** as a common abstraction of ring theoretic and lattice theoretic generalization of a Boolean algebra which satisfies almost all conditions