A CATEGORICAL EQUIVALENCE FOR TENSE PSEUDOCOMPLEMENTED DISTRIBUTIVE LATTICES

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A pseudocomplemented distributive lattice (also known as a distributive p-algebra) is an algebraic structure denoted as $\langle A, \wedge, \vee, *, 0, 1 \rangle$, where the underlying structure $\langle A, \wedge, \vee, 0, 1 \rangle$ is a bounded distributive lattice, and the unary operation * represents a pseudocomplement operation [1]. This operation satisfies the property that $x \wedge y = 0$ if and only if $x \leq y^*$.

In this paper, our motivation stems from the definition of tense operators on distributive lattices proposed by Chajda and Paseka in [2]. We introduce and explore the variety of tense pseudocomplemented distributive lattices. Specifically, we establish a categorical equivalence of these structures with a full subcategory of tense KAN-algebras.

Trabajo en conjunto con Gustavo Pelaitay (Instituto de Ciencias Básicas, Universidad Nacional de San Juan y CONICET).

Referencias

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