FUZZY n-FOLD INTEGRAL FILTERS IN BL-ALGEBRAS

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Abstract

In this paper, we introduce the notion of fuzzy n-fold integral filter in BL-algebras and we state and prove several properties of fuzzy n-fold integral filters. Using a level subset of a fuzzy set in a BL-algebra, we give a characterization of fuzzy n-fold integral filters. Also, we prove that the homomorphic image and preimage of fuzzy n-fold integral filters are also fuzzy n-fold integral filters. Finally, we study the relationship among fuzzy n-fold obstinate filters, fuzzy n-fold integral filters and fuzzy n-fold fantastic filters

Keywords: BL-algebra, fuzzy n-fold obstinate filter, n-fold obstinate BL-algebra, n-fold integral BL-algebra and fuzzy n-fold integra filter.

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