TRANSLATIONS OF FUZZY IDEALS 
IN BCK/BCI-ALGEBRAS

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Abstract

Based on fuzzy set theory, extensions, translations and multiplications of ideals in BCK/BCI-algebras are discussed. Relations among fuzzy translations, fuzzy extensions and fuzzy multiplications of fuzzy ideals are investigated.

Keywords: Fuzzy ideal, Fuzzy translation, Fuzzy extension, Fuzzy multiplication.

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1. Introduction

The study of BCK-algebras was initiated by K. Iséki in 1966 as a generalization of the concept of set-theoretic difference and propositional calculus. For the general development of BCK/BCI-algebras, the ideal theory and its fuzzification play an important role. Jun (together with Kim, Meng, Song and Xin) studied fuzzy aspects of several notions in BCK/BCI-algebras (see [2, 3, 4, 7]).


In this paper, we discuss fuzzy translations, fuzzy extensions and fuzzy multiplications of fuzzy ideals in BCK/BCI-algebras. We investigate relations among fuzzy translations, fuzzy extensions and fuzzy multiplications of fuzzy ideals in in BCK/BCI-algebras.

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