

Fuzzy m - β -Irresolute Function

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Abstract

In [3], fuzzy m - β -open set is introduced. Using this concept as a basic tool, in this paper we introduce β -irresolute function in fuzzy m -space, termed as fuzzy m - β -irresolute function. Afterwards, it is shown that fuzzy m - β -irresolute function is fuzzy m - e^* -continuous function [3] as well as fuzzy almost e^* -continuous function [3], but not conversely. Lastly some applications of this newly defined function are given.

AMS Subject Classifications: 54A40, 54C99.

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1. Introduction

Fuzzy minimal structure (m -structure, for short) is introduced by Alimohammady and Roohi in [1] as follows : A family \mathcal{M} of fuzzy sets in a non-empty set X is said to be fuzzy minimal structure on X if $\alpha 1_X \in \mathcal{M}$ for every $\alpha \in [0, 1]$. A more general version of fuzzy minimal structure (in the sense of Chang) are introduced in [5, 8] as follows : A family \mathcal{F} of fuzzy sets in a non-empty set X is a fuzzy minimal structure on X if $0_X \in \mathcal{F}$ and $1_X \in \mathcal{F}$. Throughout this paper, we use the notion of fuzzy minimal structure in the sense of Chang. Using this concept in [2] fuzzy m -space is introduced and studied. Fuzzy m -open set [2], fuzzy m - β -open set [3], fuzzy m - e^* -open set [3] are introduced and found their interrelations