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ON FUZZY GENERALIZED PREOPEN SETS

A. Swaminathan and Margaret Sheela*

Department of Mathematics,
Government Arts College (Autonomous),
Kumbakonam, Tamil Nadu - 612002, INDIA

E-mail : asnathanway@gmail.com

*Department of Mathematics
Annamalai University,
Annamalainagar, Tamil Nadu - 608002, INDIA

E-mail : mshee1836@gmail.com

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Abstract: We aim to show in this paper that fuzzy μ-preopen sets of a GFTS or fuzzy μ-space X may be equivalent to fuzzy μ-open in X. Moreover we portray generalized fuzzy paracompactness of a fuzzy μ-space X via fuzzy μ-preopen sets in X.

Keywords and Phrases: Fuzzy μ-preopen set, fuzzy μ-dense, fuzzy μ-locally finite, fuzzy μ-paracompact.

2020 Mathematics Subject Classification: 54A05, 54D20.

1. Introduction

Chang [3] presented fuzzy topology after the discovery of fuzzy sets by Zadeh [14]. The notion of generalized topology proposed by Csaszar in [6]. Let I^X denotes non empty set X. A fuzzy subcollection μ of I^X is called a generalized fuzzy topology [4] on X if $0_X \in \mu$ and $\bigvee\{\xi_\alpha \alpha \in \Delta\} \in \mu$ whenever $\xi_\alpha \in \Delta$ for every $\alpha \in \mu$. The terms FS, Fμ-O,Fμ-PO and GFTS stands for fuzzy set, fuzzy μ-open, fuzzy μ-preopen and generalized fuzzy topological space respectively. A fuzzy set $\xi \in \mu$ is called fuzzy μ-open [4] of (X, μ). The complement of fuzzy μ-open set