

## **ON $\mu^*$ - CLOSED FUZZY SETS, FUZZY $\mu^*$ -CLOSED MAPS, FUZZY $\mu^*$ - IRRESOLUTE MAPS AND $\mu^*$ -HOMEOMORPHISM MAPPINGS IN FUZZY TOPOLOGICAL SPACES**

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### **Abstract**

The aim of this paper is to introduce a new class of fuzzy sets, namely  $\mu^*$ -closed fuzzy sets for fuzzy topological spaces. This class is a super class of class of the closed fuzzy sets. We introduce and study new space namely fuzzy  $cT \mu^*$ -spaces and  $\mu T \mu^*$ -spaces. Further, the concept of fuzzy  $\mu^*$ -continuous, fuzzy  $\mu^*$ -irresolute mappings, fuzzy  $\mu^*$ -closed maps, fuzzy  $\mu^*$ -open maps and fuzzy  $\mu^*$ -homeomorphism in fuzzy topological spaces are also introduced, studied and some of there properties are obtained.

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Key Words and Phrases :  $\mu^*$ -closed fuzzy sets,  $f \mu^*$ -continuous,  $f \mu^*$ -irresolute,  $f \mu^*$ -open,  $f \mu^*$ -closed mappings and  $f \mu^*$ -homeomorphism.

2000 Mathematics Subject Classification: 54A40

Ascent Publication House: [http:// www.ascent-journals.com](http://www.ascent-journals.com)