

ON ALMOST CONTRA-SOMEWHAT FUZZY CONTINUOUS FUNCTIONS

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Abstract: In this paper, a new notion of fuzzy contra-continuity, called almost contra-somewhat fuzzy continuity between fuzzy topological spaces, is introduced. Several characterizations of these functions are obtained and it is shown that fuzzy almost contra-semi continuous functions are almost contra-somewhat fuzzy continuous functions. The conditions under which fuzzy hyper connected spaces become the fuzzy Baire spaces, fuzzy second category spaces and fuzzy almost irresolvable spaces, are obtained by means of almost contra-somewhat fuzzy continuous functions.

Keywords and Phrases: Fuzzy dense set, fuzzy regular closed set, fuzzy β -open set, Fuzzy resolvable sets, fuzzy almost contra-semi continuous function, Fuzzy hyper connected space, fuzzy Baire space.

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1. Introduction

The concept of fuzzy sets as a new approach for modelling uncertainties was introduced by Zadeh [27] in 1965. This concept provides a natural foundation for