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# ADVANCES IN MATHEMATICAL AND STATISTICAL SCIENCE

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11.	STATISTICAL INFERENCE R. R. Tembhumne	94 - 99
12.	TEACHING-LEARNING OF LIMITS OF FUNCTIONS: A TEACHER-STUDENT PERSPECTIVE Kailas S. Borase	100 - 108
13.	k - NEAREST NEIGHBOR (k-NN) ALGORITHM FOR CLASSIFICATION Sudha Bishnoi	109 - 114
14.	MICRO $g'$ -CONTINUOUS MAPS AND MICRO $g'$ -IRRESOLUTE MAPS IN MICRO TOPOLOGICAL SPACES S. Sandhiya, R. Anandhi and N. Balamani	115 - 125
15.	MICRO $\Psi$ -CONTINUOUS MAPS AND MICRO $\Psi$ -IRRESOLUTE MAPS IN MICRO TOPOLOGICAL SPACES T. Sowmiya, R. Anandhi and N. Balamani	126 - 136

# MICRO $g^*$ -CONTINUOUS MAPS AND MICRO $g^*$ -IRRESOLUTE MAPS IN MICRO TOPOLOGICAL SPACES

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## Abstract:

The purpose of this paper is to define Micro  $g^*$ -continuous maps and Micro  $g^*$ -irresolute maps in Micro topological spaces. Further we investigate the properties and characterizations of Micro  $g^*$ -continuous maps and Micro  $g^*$ -irresolute maps with pertinent examples.

**Mathematical Subject Classification:** 54B05, 54A10, 54C05

**Keywords:** Micro topological spaces, Micro continuous map, Micro  $g^*$ -continuous map, Micro  $g^*$ -irresolute map.

## 1. Introduction

The concept of rough set theory was studied by Pawlak [6] and he introduced the notion of lower approximation, upper approximation and boundary region of a subset of the universe. Carmel Richard [4] introduced the concept of Nano topology. The Micro topology was introduced by Sakkraiveeraman Chandrasekar [8] and he also studied the concepts of Micro pre-open and Micro semi-open sets. Further he introduced the concept of Micro continuous map. He also defined Micro pre-continuous and Micro semi-continuous maps in Micro topological spaces. Chandrasekar and Swathi [5] introduced Micro  $\alpha$ -continuity in Micro topological spaces. Taha *et al.* [11] initiated the concept of Micro  $g$ -continuous map. Anandhi and Balamani [1,2,3] initiated the concept of Micro  $\alpha$ -generalized closed set, separation axiom and Micro  $\alpha g$ -continuous map in Micro topological spaces. Recently, Sandhiya and Balamani [9] introduced the concept of Micro  $g^*$ -closed sets in Micro topological spaces and analyzed some of its properties. Moreover, Micro  $\psi$ -closed sets are introduced by Sowmiya and Balamani [10]. In this paper we have introduced a new class of Micro continuous and Micro irresolute maps called Micro  $g^*$ -continuous and Micro  $g^*$ -irresolute maps in Micro topological spaces. Also the relationship between these maps and other existing maps are obtained and their properties are analyzed.