

MICRO αg -CONTINUOUS MAPS IN MICRO TOPOLOGICAL SPACES

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Abstract: In this paper, we introduce and study the properties of Micro αg -closure operator and Micro αg -interior operator. As an application of Micro αg -closed sets, we introduce four new spaces namely, Micro α -space, Micro ${}_{\alpha}T_b$ -space, Micro ${}_{1/2}T_{\alpha}$ -space, Micro ${}_{\alpha}T_d$ -space and analyze their properties and interrelations. Further, we introduce a new notion of Micro continuous maps called Micro αg -continuous maps with the help of Micro αg -closed sets. Also, we obtain interrelationships between the newly defined maps and already existing various Micro continuous maps. Finally, we derive some basic properties of Micro αg -continuous maps via separation axioms.

Keywords and Phrases: Micro αg -closed set, Micro αg -interior, Micro αg -closure, separation axioms, Micro continuous maps, Micro αg -continuous maps.

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1. Introduction

Topology provides a general framework for studying spatial structures and properties that remain invariant under suitable mappings. In recent years, generalized topological structures have received considerable attention because they provide flexible tools for studying sets and mappings when the usual open and closed set conditions are too restrictive. In particular, generalized open sets, generalized