

## ON SOME ADVANCES IN STRONGER FORMS OF FUZZY $g^*$ SEMI - CONTINUOUS FUNCTIONS IN FUZZY TOPOLOGICAL SPACES

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### Abstract

In this paper, the class of  $g^*$ semi - closed fuzzy sets are introduced. This class properly fits between the class of semi-closed fuzzy sets and the class of  $sg$  - closed fuzzy sets in fuzzy topological spaces.

Further, the concept of the stronger forms of fuzzy  $g^*$ s-continuous functions namely strongly fuzzy  $g^*$ s-continuous, perfectly fuzzy  $g^*$ s-continuous and completely fuzzy  $g^*$ s-continuous have been introduced, studied and some of their properties are obtained.

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Key Words and Phrases : *Fuzzy  $g^*$ s-continuous functions, strongly fuzzy  $g^*$ s-continuous, perfectly fuzzy  $g^*$ s-continuous and completely fuzzy  $g^*$ s-continuous.*

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