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## FUZZY T<sub>ã</sub>-SPACES

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**Abstract:** In this paper, we introduce and study the concepts of fuzzy  $T\tilde{g}$ -spaces, fuzzy  $gT_{\tilde{g}}$ -spaces and their properties are obtain. The relations between  $T_{\tilde{g}}$ -spaces, fuzzy  $gT_{\tilde{g}}$ -spaces and other fuzzy spaces are given. Also many suitable examples are given.

**Keywords and Phrases:** Fuzzy  $\tilde{g}$ -closed sets, fuzzy  $T_{\tilde{g}}$ -spaces and fuzzy  $gT_{\tilde{g}}$ -spaces.

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## 1. Introduction

In the year 1965, Zadeh [18] introduced and studied the concept of a fuzzy subset. Following research in this area and related activities, many branches of science and engineering have found applications. Chang [5] introduced and studied fuzzy. Many researchers have contributed to the development of fuzzy topological spaces, for example Azad [1], Wong [16], Tirpahy [14], Dutta [6] and Sarma [10] and so on. The concepts of image and inverse image of a fuzzy set under a function are included, as are the properties demonstrated by Chang [5] and Warren [15].