

## MAPPINGS ON FERMATEAN FUZZY SOFT CLASSES

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**Abstract:** This paper defined mappings on Fermatean fuzzy soft classes and established some results related to images and inverse images of Fermatean fuzzy soft sets under these mappings. Further Fermatean fuzzy soft continuous, Fermatean fuzzy soft open and Fermatean fuzzy soft closed mappings in Fermatean fuzzy soft topological spaces are created and established some theorems related their properties and characterizations.

**Keywords and Phrases:** Fermatean fuzzy soft sets, Fermatean fuzzy soft mappings and Fermatean fuzzy soft continuity.

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### 1. Introduction

Vagueness and ambiguity in information are crucial factors in decision making process. Crisp set theory is insufficient to handle the complex MADM problems involving vague and imprecise information. To handle the impreciseness and uncertainty of complex problems, Zadeh [19] in 1965, created  $\mathcal{FS}$ s as an extension of