

**δ -CONTINUOUS AND IRRESOLUTE MAPS IN PYTHAGOREAN
FUZZY NANO TOPOLOGICAL SPACES AND ITS APPLICATION**

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Abstract: In this paper, we develop the concept of Pythagorean fuzzy nano (resp. δ , $\delta\mathcal{P}$, $\delta\mathcal{S}$, $\delta\alpha$ & $\delta\beta$ or e^*)-continuity in Pythagorean fuzzy nano topological spaces and specialize some of their basic properties with examples. Also, we discuss about properties and characterization of Pythagorean fuzzy irresolute maps and application of Multiple Criteria Decision Making (MCDM) techniques to the real-world problem using a proposed similarity measure in Pythagorean fuzzy nano topological spaces.

Keywords and Phrases: $\mathcal{PF}\mathfrak{N}\delta Cts$, $\mathcal{PF}\mathfrak{N}\delta SCts$, $\mathcal{PF}\mathfrak{N}\delta Irr$, $\mathcal{PF}\mathfrak{N}\delta SIrr$ and Zhang similarity measure.

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