

On extended partial (fuzzy) strong k-metric spaces

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Abstract

In this paper, we introduce a new notion of extended partial strong k-metric spaces with controlled operators and provide some examples to show that is different from extended k-metric spaces which initiated by Kamran et al. Furthermore, we introduce the concept of extended partial fuzzy strong k-metric spaces with controlled operators, which is a generalization of extended k-metric in the sense of Mehmood given. Finally, we establish fixed point theorems for self-mappings which satisfy Banach contraction principle on extended partial fuzzy strong k-metric spaces. Also, we provide some examples to illustrate our results.

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