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A COMMON FIXED POINT THEOREM FOR FOUR SELF MAPS ON A FUZZY METRIC SPACE CONTROLLED BY AN IMPLICIT RELATION

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Abstract

B. Singh and S. Jain [12] have introduced semi compatible and weak compatible maps in a fuzzy metric space. V. H. Badshah and Varsha Joshi [1] proved a common fixed point theorem for six mappings on a fuzzy metric space using the notions of semi compatibility and reciprocal continuity of maps satisfying an implicit relation. In this paper we redefine the implicit relation and prove a common fixed point theorem for four self maps and extend the theorem for six mappings on a fuzzy metric space using the notions of semi compatibility and reciprocal continuity.

Key Words : *Fuzzy metric space, Semi compatibility, Reciprocal continuity, Implicit relation.*

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