Abstract

In this paper, we prove common fixed point theorems in fuzzy metric spaces for weakly compatible mappings along with property (E.A.) satisfying implicit relation. Property (E.A.) buys containment of ranges without any continuity requirement besides minimizing the commutativity conditions of the maps to commutativity at their point of coincidence. Moreover, property (E.A.)
allows replacing the completeness requirement of the space with a more natural condition of closeness of the range.

Reference

- Regan, D. O’, and Abbas, M. Necessary and sufficient conditions for common fixed point theorems in fuzzy metric spaces, Demonstratio Mathematica, to appear.
Common Fixed Point Theorems in Fuzzy Metric Space using Implicit Relation


Index Terms

Computer Science

Fuzzy Systems

Key words

Common fixed point

Weakly compatible maps

property (E.A.)