α-TYPE FUZZY $H$-CONTRACTIVE MAPPINGS IN FUZZY METRIC SPACES

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Abstract. We introduce a new concept of $\alpha$-fuzzy $H$-contractive mapping which is essentially weaker than the class of fuzzy contractive mapping and stronger than the concept of $\alpha$-$\phi$-fuzzy contractive mapping. For this type of contractions, the existence and uniqueness of fixed point in fuzzy $M$-complete metric spaces is also established.

Key Words and Phrases: Contractive mapping, fixed point, t-norm, fuzzy metric space, strong fuzzy metric space.

2010 Mathematics Subject Classification: 47H10, 54H25.

Conflicts of Interest. The authors declare that there is no conflicts of interest regarding the publication of this manuscript.

Acknowledgements. Authors are grateful to the editor and referees for their valuable suggestions and critical remarks for improving this paper. The third and fourth authors are supported by projects MNTRRS-174009, III 44006 and PSNTR project no. 114-451-1084.

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Received: January 6, 2016; Accepted: October 13, 2016.