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**τ -DISTANCE IN A GENERAL TOPOLOGICAL SPACE
(X, τ) WITH APPLICATION TO FIXED POINT THEORY**

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ABSTRACT. The main purpose of this paper is to define the notion of a τ -distance function in a general topological space (X, τ) . As application, we get a generalization of the well known Banach's fixed point theorem.

A.M.S. (MOS) Subject Classification Codes. 54A05, 47H10, 54H25, 54E70

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