Cone rectangular metric spaces over Banach algebras and fixed point results of T-contraction mappings

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Abstract: In this paper, we introduce the notion of T-contraction mappings on cone rectangular metric spaces over Banach algebras. Further, we establish the existence and uniqueness of fixed point for such mappings. Our results extend and generalize the Banach contraction principle and Edelstein fixed point theorem given in [1–6], and many recent results in the literature. Moreover, an example to illustrate the main result is also presented.

Keywords: cone rectangular metric spaces, Banach algebras, T-contraction mapping, fixed point.

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