FIXED POINT THEOREMS IN CONE METRIC SPACES WITH BANACH ALGEBRA CONES

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Abstract

In 2007 Huang and Zhang [4] introduced the notion of cone metric spaces, replacing the set R of real numbers by an ordered real Banach space E as the codomain of a metric. In the present paper we take E to be an ordered real Banach algebra, introduce the notion of a Banach algebra cone and prove two fixed point theorems in cone metric spaces with Banach algebra cones. We also show that our results are generalizations of comparable results in the literature.

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