

# A parametric $(b, \vartheta)$ -metric space and some fixed point theorems

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## Abstract

In this paper, motivated by Kamran et al. [Mathematics, 5(19), (2017), 7 pages] we introduce the notion of parametric  $(b, \vartheta)$ -metric space as an extended form of parametric  $b$ -metric space, which was introduced by Hussain et al. [J. Nonlinear Sci. Appl., 8 (2015), 719–739] and improve the results of Alsulami et al. [Abstract and Applied Analysis, (2014), Article ID 187031, 10 pages] and others in such space. We also apply our result to establish an existence of solution of integral equation.

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