

ONE TRIPLED FIXED POINT RESULT IN PARTIALLY ORDERED 0-COMPLETE PARTIAL METRIC SPACES

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ABSTRACT. In this paper, using the setting of partially ordered 0-complete partial metric spaces, one tripled fixed point result is obtained. Our established result generalizes and improves the existing tripled fixed point results in the literature in the sense that weaker conditions are used.

1. INTRODUCTION AND PRELIMINARIES

Matthews [14] generalized the concept of a metric space by introducing partial metric spaces. Based on the notion of partial metric spaces, Matthews [13][14], Oltra and Valero [19], Ilić et al. [12], obtained some fixed point theorems for mappings satisfying different contractive conditions. Recently, Berinde and Borcut introduced the concept of tripled fixed point for nonlinear mappings in partially ordered complete metric spaces ([10][11]). Aydi et al. presented tripled coincidence theorem for weak φ -contractions in partially ordered metric space ([9]). For some new results on partial metric spaces see [1]–[8].

The aim of this paper is to continue the study of tripled fixed points in partially ordered 0-complete partial metric spaces.

Consistent with Matthews [13][14] O'Neill [16][17] and Oltra et al.[18] the following definitions and results will be needed throughout this paper.

Definition 1.1. A partial metric on a nonempty set X is a function $p : X \times X \rightarrow R^+$ such that for all $x, y, z \in X$:

- (p₁) $x = y \Leftrightarrow p(x, x) = p(x, y) = p(y, y)$,
- (p₂) $p(x, x) \leq p(x, y)$,

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