COMMON FIXED POINT THEOREMS FOR MAPS SATISFYING

$\varphi - \phi$ CONTRACTIONS IN COMPLEX VALUED METRIC SPACES

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ABSTRACT

In this paper, we use a new method to generalize the conclusion in [Fixed Point Theory & Applications, 2018, 2018(1):1] into the complex valued metric spaces. A class of 5-dimensional functions ϕ was defined, and we get the conclusion that the family of maps satisfying ϕ contractions have a unique common fixed point in complex valued metric spaces by generalizing Cauchy principle. The conclusion we obtained generalize many fixed point results in complex valued metric spaces.

Key words: Complex valued metric spaces, Cauchy sequence, φ – contractions, Fixed point.

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