

FIXED POINT RESULTS FOR w -CONTRACTIONS

FRANCESCA VETRO

Nonlinear Analysis Research Group, Ton Duc Thang University, Ho Chi Minh City, Vietnam
Faculty of Mathematics and Statistics, Ton Duc Thang University, Ho Chi Minh City, Vietnam
E-mail: francescavetro@tdtu.edu.vn

Dedicated to Professor Stojan Radenović on the occasion of his 70th birthday.

Abstract. We work in the setting of metric spaces endowed with a w_0 -distance. Thanks to two suitable families of functions, we introduce a new type of contraction which we call w -contraction. We use the w -contractions in order to establish new and more general results of existence and uniqueness of fixed point. In particular, we stress that as applications of our main result, we get the existence and uniqueness of fixed point for cyclic mappings and mappings that satisfy a contractive condition of integral type.

Key Words and Phrases: Fixed point, metric space, w_0 -distance, cyclic mapping, contractive condition of integral type.

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