

Some Common Fixed Point Results of Mappings in $0-\sigma$ -Complete Metric-like Spaces via New Function

Zaid Mohammed Fadail¹, Abd Ghafur Bin Ahmad², Arslan Hojat Ansari³,
Stojan Radenović⁴ and Miloje Rajović⁵

^{1,2} School of Mathematical Sciences
Faculty of Science and Technology
Universiti Kebangsaan Malaysia
43600 UKM Bangi, Selangor Darul Ehsan, Malaysia

³ Department of Mathematics, Karaj Branch
Islamic Azad University, Karaj, Iran

⁴ Faculty of Mathematics and Information Technology
Teacher Education, Dong Thap University
Cao Lanch City, Dong Thap Province, Viet Nam

⁵ Faculty of Mathematical Engineering, Dositejeva 19
36000 Kraljevo, Serbia

Copyright © 2015 Zaid Mohammed Fadail et al. This article is distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

In this paper, using the context of $0-\sigma$ -complete metric-like spaces, some common fixed point results of maps that satisfy the generalized so-called (F, ψ, φ) -weak contractive conditions are obtained. Our results generalize, extend, unify and complement many existing results in the literature. Examples are given to show the validity of our results.

Mathematics Subject Classification: 54H25, 47H10

Keywords: Common fixed point; lower semi-continuous function; weakly compatible; $0-\sigma$ -complete, metric-like space, C -class function

