FIXED POINT THEOREMS FOR NONSELF OPERATORS
IN $b$-METRIC SPACES

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Abstract. In this paper we prove some fixed point theorems for different type of contractions in
the setting of a $b$-metric space. The starting point was a recent result of Rus and Şerban [16]. The
presented theorems extend, generalize and unify several recent results in the literature.

Key Words and Phrases: Fixed point, $b$-metric space, nonself contraction, data dependence.

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2011-3-0094.

References

[1] H. Aydi, M.-F. Bota, E. Karapınar, S. Moradi, A common fixed point for weak $\phi$-contractions
[3] V. Berinde, Generalized contractions in quasimetric spaces, Seminar on Fixed Point Theory,
[5] V. Berinde, M. Pacurar, Fixed point theorems for nonself singlevalued almost contractions,
[6] M. Boriceanu, A. Petruşel, I.A. Rus, Fixed point theorems for some multivalued generalized
65-76.
2010.
[8] A. Chis-Novac, R. Precup, I.A. Rus, Data dependence of fixed points for nonself generalized
contractions, Fixed Point Theory, 10(2009), no. 1, 73-87.
sitatis Ostraviensis, 1(1993), 5-11.
[11] M. Păcurar, A fixed point result for $\varphi$--contractions on $b$--metric spaces without the boundedness
References


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