MAIA TYPE FIXED POINT THEOREMS
FOR PREŠIĆ TYPE OPERATORS

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Abstract. In this paper, we extend to the case of product spaces, two generalizations of Maia fixed point theorem [Maia, Maria Grazia. Un'osservazione sulle contrazioni metriche. (Italian) Rend. Sem. Mat. Univ. Padova 40 1968 139–143] given by Rus I. A. in [Rus, Ioan A. Generalized contractions. Seminar on Fixed Point Theory, Babeş Bolyai Univ., Cluj-Napoca, 1983, Preprint nr. 3, pp. 1-130, 35] and [Rus, Ioan A. Basic problem for Maia's theorem. Seminar on Fixed Point Theory, Babeş Bolyai Univ., Cluj-Napoca, 1981, Preprint nr. 3, pp. 112-115]. Following the results in [Petruşel, A., Fredholm-Volterra integral equations and Maia's theorem, Seminar on Fixed Point Theory, Babeş Bolyai Univ., Cluj-Napoca, (1988), Preprint nr. 3, pp. 79–82], a theorem on the existence and uniqueness of solutions of Fredholm-Volterra integral equations, using a theorem of Maia type in product metric spaces, is proved.

Key Words and Phrases: Fixed point, Maia, Prešić type contraction, two metrics.

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