GLOBAL ATTRACTIVITY RESULTS FOR COMPARABLE SOLUTIONS OF NONLINEAR HYBRID FRACTIONAL INTEGRAL EQUATIONS

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Abstract. We present a couple of global attractivity and asymptotic stability results for the comparable solutions of a certain hybrid functional nonlinear fractional integral equation with a linear perturbation of first kind on the unbounded intervals of real line under some weaker partially Lipschitz and partially compactness type conditions. We employ a new partially measure theoretic fixed point theorem in our analysis and develop an algorithm for the solutions. We claim that the results are new to the literature.


Keywords and phrases: partially ordered space, measure of noncompactness, hybrid fixed point theorem, fractional integral equation, existence, attractivity and stability.

REFERENCES