SOME BASIC RANDOM FIXED POINT THEOREMS WITH PPF DEPENDENCE AND FUNCTIONAL RANDOM DIFFERENTIAL EQUATIONS

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Abstract. In this paper two basic random fixed point theorems with PPF dependence are proved for random operators in separable Banach spaces with different domain and range spaces. The obtained abstract results are applied to certain nonlinear functional random differential equations for proving the existence results for random solutions with PPF dependence.

Keywords and phrases: Banach space, random contraction, random fixed point theorem, functional differential equation, random solution, PPF dependence.

REFERENCES