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EXISTENCE THEORY FOR QUADRATIC PERTURBATIONS OF ABSTRACT MEASURE INTEGRO–DIFFERENTIAL EQUATIONS

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Abstract. In this paper, an existence theorem for quadratic perturbations of a nonlinear abstract measure integro-differential equation is proved via a nonlinear alternative of Leray-Schauder type. An existence result is also proved for the extremal solutions for Carathéodory as well as discontinuous cases of the nonlinearities involved in the equations.

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