On nonuniform exponential dichotomy for evolutionary processes

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Abstract

The problem of nonuniform exponential dichotomy of evolutionary processes in Banach spaces is discussed. A necessary and sufficient condition for the uniform exponential stability of a linear evolutionary process in a Banach space has been proved by R. Datko in *Uniform asymptotic stability of evolution processes in Banach spaces* (Siam J. Math. Anal. 3 (1973), 428-445). This paper extend Datko's theorem to the general case of nonuniform exponential dichotomy.