

# LYAPUNOV FUNCTIONS FOR TRICHOTOMY WITH GROWTH RATES OF EVOLUTION OPERATORS IN BANACH SPACES\*

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Dedicated to Dr. Vasile Drăgan on the occasion of his 70<sup>th</sup> anniversary

## Abstract

The main objective of this paper is to give a characterization in terms of Lyapunov functions for trichotomy with growth rates of evolution operators in Banach spaces.

**MSC:** 34D09, 37B25

**keywords:** Trichotomy, growth rates, Lyapunov function, evolution operator

## 1 Introduction

The concept of trichotomy, firstly arose in the work [19] of R.J. Sacker and G.R. Sell in 1976. They described trichotomy for linear differential systems

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