CONCEPTS OF DICHOTOMY FOR SKEW-EVOLUTION SEMIFLOWS IN BANACH SPACES[∗]

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Abstract

In this paper we investigate some dichotomy concepts for skew-evolution semiflows in Banach spaces. Our main objective is to establish relations between these concepts. We motivate our approach by illustrative examples.

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keywords: skew-evolution semiflow, exponential dichotomy, polynomial dichotomy

1   Introduction

In the qualitative theory of evolution equations, the exponential dichotomy is one of the most important asymptotic properties, and in the last years it was treated from various perspectives (see [1] –[16]).