Continuous Dependence of Inverse Fundamental Matrices of Generalized Linear Ordinary Differential Equations on a Parameter

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Abstract

The problem of continuous dependence for inverses of fundamental matrices in the case when uniform convergence is violated is presented here.

Key words: Generalized linear ordinary differential equations, fundamental matrix, adjoint equation, continuous dependence on a parameter, emphatic convergence.

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1 Introduction

In this work we are dealing with the problem of continuous dependence for inverses of fundamental matrices. We make use of the results from [A] and from [T1, chapter 3].

In the second section a survey of known results concerning systems of generalized linear ordinary differential equations, fundamental matrix and adjoint equation is given. Main results of [A] and [T1, chapter 3] are presented here, too.

Our main result is formulated in Theorem 4. The case when uniform convergence is violated is presented here.