

## THE STUDY OF A BOUNDARY VALUE PROBLEM WITH PARAMETER FOR A SYSTEM WITH ADVANCED AND RETARDED ARGUMENT

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**Abstract.** The purpose of this paper is to study the existence and uniqueness, data dependence of the solutions of a boundary value problem with parameter for a system of functional-differential equations with retarded and advanced arguments, by applying fixed point theory. Here is used the Perov's technique. In this paper we extend some results from [3] and [12].

**Key Words and Phrases:** Functional-differential equations, boundary value problems, Perov's fixed point theorem, weakly Picard operator, fibre contraction principle, functional differential equations of mixed type.

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