

**Park, J.-Y.; Jeong, J.-M.; Kwun, Y.-C.**

**Optimal initial functions of retarded control systems.** (English) Zbl 0881.49018

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**Summary:** This paper deals with the optimization problem of initial functions and optimality conditions for retarded functional equations for the given cost functions. Under ensuring the regularity of the solution of the retarded system we proceed to necessary optimality condition of the optimal solution for the cost function in the set of admissible controls that is closed and convex.

**MSC:**

49K25 Optimal control problems with equations with ret.arguments (nec.) (MSC2000)

49N60 Regularity of solutions in optimal control

**Keywords:**

functional differential equations with time delay; initial functions; retarded functional equations; retarded system; necessary optimality condition; optimal solution

**Full Text:** [Link](#) [EuDML](#)

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