Exact and trajectory controllability of second order nonlinear differential equations with deviated argument

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Abstract.
In this manuscript, we consider a control system governed by a second order nonlinear differential equations with deviated argument in a Hilbert space $X$. We used the strongly continuous cosine family of bounded linear operators and fixed point method to study the exact and trajectory controllability. Also, we study the exact controllability of the nonlocal control problem. Finally, we give an example to illustrate the application of these results.

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References


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