NUMERICAL MINIMUM TIME CONTROL TO A CLASS OF SINGULAR INTEGRO-DIFFERENTIAL EQUATIONS

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This study presents a numerical method to find the minimum time for the state of one class of integro-differential equations of the first kind equations to reach its attainable region by assuming the forcing terms of the equations as controls. These equations consist of integro-differential terms with weakly singular kernels. Feasibility of the numerical method is demonstrated by comparisons of minimum time and a possible time using extreme controls to reach the attainable region with different initial conditions.

REFERENCES