Solutions and Numerical Optimal Issues to Neutral Singular Integro-Differential Equations 蔣世中 Applied Statistics Management chiang@chu.edu.tw

Abstract

We consider two numerical methods for optimal controls to a class of singular integro-differential equations originally from aeroelasticity issue. One of the methods is ubiquitously developed from the analytical solutions of these equations. By testing three typical cost functions, we compare the numerical results, the corresponding optimal controls and the related optimal states.

Keyword: optimal controls, singular integro-differential equations