

Computational methods based on complexity reduction approach for first kind linear Fredholm integral equations with semi-smooth kernel

Abstract

The main aim of this paper is to investigate the performance a family of Gauss-Seidel (GS) iterative method consists of Full-Sweep Gauss-Seidel (FSGS), Half-Sweep Gauss-Seidel (HSGS) and Quarter-Sweep Gauss-Seidel (QSGS) methods in solving linear systems associated with the first kind linear Fredholm integral equations. The details of the proposed methods are explained. Some numerical analyses are given in order to verify the performance of the proposed methods.