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Solving Fredholm Second Order Integro-Differential Equation with Logarithmic Kernel

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Abstract

In this work, we are interested in solving Fredholm second order integro-differential equation. The collocation method is developed to obtain an approximate solution to the equation. An analysis of the error is presented, closing by providing numerical tests to show the efficiency of the methods.

[1] Nedjem Eddine Ramdani and Abdelhak Hadj, Solving Fredholm Second Order Integro-Differential Equation with Logarithmic Kernel Using the Airfoil Collocation Method, (2022), *Malaysian J. Math. Sci.*, 16 (1), 79-86.

[2] Nedjem Eddine Ramdani, Sandra Pinelas, Solving nonlinear integro-differential equations using numerical method, (2022), *Turkish J. Math.*, 46 (2), 675-687.

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