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www.academicfora.comAbstract proceeding
MMHS-September 23-24,
Dubai,
ISBN: 978-969-670-

A New Method for Solving of 2d Fredholm Integral Equation with Rh Wavelet

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Abstract

In this paper we have introduced a computational method for a class of two-dimensional nonlinear Fredholm integral equations. The method is based on 2D Haar wavelet. Also, Banach fixed point theorem guarantees that under certain assumptions, this equation has a unique solution. Numerical examples are presented and results are compared with other numerical methods.

Keywords: Two-dimensional nonlinear Fredholm integral equations; 2D Haar wavelet; fixed point theorem; error analysis.

MSC 2010:47A56; 45B05; 47H10; 42C40,

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