Analytical solutions nonhomogeneous 1D Wave Equation with Dirichlet condition using Green Function

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ABSTRACT

The movement of the sea floor can generate a wave at the sea surface. If the comparison between the amplitude and the wavelength is small enough, then the wave propagation models used is the Shallow Water Wave Equation (Shallow Water Wave Equation). In the study sought analytic solutions of linear equations of shallow water waves generated by the movement of the base. Simplification of shallow water wave equation linear, nonhomogeneous wave equation. Therefore, it is then defined functions green obtained from Fourier integral.

Kata Kunci: *LSWE, integral fourier, green function*