New Transform Iterative Method for Solving some Klein-Gordon Equations

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Abstract: *In this study, we treat some Klein-Gordon equations(KGEs). We propose a novel iterative approach called the Aboodh iterative method (AIM). This method, which clearly depends on the choice of the initial values, is based on the new iteration method (NIM) and the Aboodh transformation. We show that the AIM could be more valid and reliable approach than the NIM. We propose an analytical approximation of a solution for KGEs for which only a few iterations are necessary to obtain a semi-analytical solution without a loss of precision.*

Keywords: Aboodh transform, Novel iterative method, Klein- Gordon equations

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