

Homotopy Perturbation Method for a Reliable Analytic Treatment of some Evolution Equations

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In this paper, we suggest a new reliable application of He's homotopy perturbation method to study some evolution equations. The new application accelerates the rapid convergence of the series solutions and is used for analytic treatment of these equations. Some illustrative examples are given to further highlight the reliability and flexibility of the homotopy perturbation method.

Key words: Homotopy Perturbation Method; Evolution Equations; Homotopy; Exact Solution.

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