Application of He's Homotopy Perturbation Method to Stiff Systems of Ordinary Differential Equations

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We propose He's homotopy perturbation method (HPM) to solve stiff systems of ordinary differential equations. This method is very simple to be implemented. HPM is employed to compute an approximation or analytical solution of the stiff systems of linear and nonlinear ordinary differential equations.

Key words: Homotopy Perturbation Method; Stiff Systems; Systems of Differential Equations.