

Homotopy perturbation method for fractional-order Burgers-Poisson equation

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In this paper, the fractional-order Burgers-Poisson equation is introduced by replacing the first-order time derivative by fractional derivative of order α . Both exact and approximate explicit solutions are obtained by employing homotopy perturbation method. The numerical results reveal that the proposed method is very effective and simple for handling fractional-order differential equations.

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