

He's Variational Iteration Method for Solving a Partial Differential Equation Arising in Modelling of the Water Waves

Abbas Saadatmandi^a and Mehdi Dehghan^b

^a Department of Mathematics, Faculty of Science, University of Kashan, Kashan, Iran

^b Department of Applied Mathematics, Faculty of Mathematics and Computer Science, Amirkabir University of Technology, No. 424, Hafez Ave., Tehran, Iran

Reprint requests to M. D.; E-mail: mdehghan@aut.ac.ir

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The variational iteration method is applied to solve the Kawahara equation. This method produces the solutions in terms of convergent series and does not require linearization or small perturbation. Some examples are given. The comparison with the theoretical solution shows that the variational iteration method is an efficient method.

Key words: Kawahara Equation; Travelling Wave Solution; Variational Iteration Method; Closed Form Solution.

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