Application of He's Variational Iteration Method to Nonlinear Integro-Differential Equations

Ahmet Yildirim

Department of Mathematics, Science Faculty, Ege University, 35100 Bornova-İzmir, Turkey

Z. Naturforsch. **65a.** 418 – 422 (2010); received September 8, 2008 / February 6, 2009

Reprint requests to A. Y.: E-mail: ahmet.vildirim@ege.edu.tr

In this paper, an application of He's variational iteration method is applied to solve nonlinear integro-differential equations. Some examples are given to illustrate the effectiveness of the method. The results show that the method provides a straightforward and powerful mathematical tool for solving various nonlinear integro-differential equations.

Key words: He's Variational Iteration Method; Nonlinear Integro-Differential Equations.