

KINGDOM OF SAUDI ARABIA

Ministry of Higher Education

**KING ABDULAZIZ UNIVERSITY**

**Faculty of Science**



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**A modified tanh-coth method for solving the KdV and the KdV-Burgers' equations**

(2009) *Communications in Nonlinear Science and Numerical Simulation*, 14 (2), pp. 443-450. Cited 1 time.

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**Abstract**

In this work we use a modified tanh-coth method to solve the Korteweg-de Vries and Korteweg-de Vries-Burgers' equations. The main idea is to take full advantage of the Riccati equation that the tanh-function satisfies. New multiple travelling wave solutions are obtained for the Korteweg-de Vries and Korteweg-de Vries-Burgers' equations. © 2007 Elsevier B.V. All rights reserved.

**Author Keywords**

KdV equation; KdV-Burgers' equation; Riccati equation; The extended tanh method; The tanh-coth method; Travelling wave solutions

**ISSN:** 10075704