

1079-35-108

Mehmet Naci Ozer (mnozer@ogu.edu.tr), Eskisehir Osmangazi University, Art-Science Faculty, Mathematics and Computer Science Department, 26480 Eskisehir, Turkey, **Ahmet Bekir*** (abekir@ogu.edu.tr), Eskisehir Osmangazi University, Art-Science Faculty, Mathematics and Computer Science Department, 26480 Eskisehir, Turkey, and **Burcu Ayhan** (burcu_ayhan87@hotmail.com), Eskisehir Osmangazi University, Art-Science Faculty, Mathematics and Computer Science Department, 26480 Eskisehir, Turkey. *Exact solutions of nonlinear evolution equation systems.*

In this paper, we investigate two systems nonlinear evolution equations of involving parameters by applying the (G'/G) -expansion method for constructing some new exact traveling wave solutions including solitons and periodic solutions. The second order linear ordinary differential equation with constant coefficients is used as a auxiliary equation in the method. The obtained solutions are presented through the hyperbolic, the trigonometric and the rational functions. It is significant to point out that some of our solutions are in good agreement for special cases with the existing results which validates our other solutions. The method is straightforward and concise, and it holds promise for many applications. (Received January 02, 2012)