

## **Application of the functional variable method to a class of nonlinear wave equations.**

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### **Abstract**

Exact solutions to a class of nonlinear wave equations are established using the functional variable method. This method is a powerful tool to the search of exact traveling solutions in closed form. We show that, the method is straightforward and concise for several kind of nonlinear problems. Some specific examples arising in a number of physical problems are displayed using symbolic computer calculations to illustrate the efficiency and simplicity of the method.

**Keywords :** nonlinear wave, functional variable, traveling solution.

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