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**Numerical solution of sine-Gordon equation by variational iteration method.** (English)

Zbl 1209.65105

Phys. Lett., A 370, No. 5-6, 437-440 (2007).

Summary: The variational iteration method (VIM) is applied to obtain approximate analytical solution of the sine-Gordon equation without any discretization. Comparisons with the exact solutions reveal that VIM is very effective and convenient.

**MSC:**

**65M99** Numerical methods for partial differential equations, initial value and time-dependent initial-boundary value problems

Cited in **34** Documents

**35Q53** KdV equations (Korteweg-de Vries equations)

**Keywords:**

variational iteration method; sine-Gordon equation

**Full Text:** [DOI](#)

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