

The Homotopy-Perturbation Method for Solving Klein-Gordon-Type Equations with Unbounded Right- Hand Side

Afgan Aslanov

Mathematics and Computing Department, Beykent
University, Istanbul, Turkey

Reprint requests to A. A.; E-mail: afganaslanov@yahoo.com

Z. Naturforsch. **64a**, 149 – 152 (2009);
received June 16, 2008 / revised August 4, 2008

The approximate and/or exact solutions of the generalized Klein-Gordon- and sine-Gordon-type equations are obtained. We introduce a new type of initial conditions to extend the class of solvable problems.

Key words: Singularity; Initial Value Problems;
Homotopy-Perturbation Method;
Klein-Gordon Equation.