

# A Review of Recent Approaches to the Variation Iterative Method for a Non-linear Partial Differential Equation

Megha Saini

Department of Mathematics, Chandigarh University, Mohali, Punjab

## ABSTRACT

This article will present the variation repetition/iterative method, a modern approach to obtaining solutions for non-linear PDEs. Non-linear equations are useful in our current world. This phenomenon is useful in applied science mathematics, physics (also in theoretical physics), natural or social sciences, and engineering applications. The purpose of this phenomenon is to formulate a qualitative strategy for evaluating nonlinear differential or partial differential equations in applied mathematics, and physics, as well as to solve problems in many domains of engineering, with the help of the variation iterative transformation method and specific conditions of the Homotopy analysis techniques.

**Keywords:** Variation Iteration Transform Method, Non-linear differential or partial differential equation, ‘L’ (Laplace)-transform, Homotopy transforms analysis method.

