Abstract

In the course of this paper, the Optimal Homotopy Asymptotic Method (OHAM) introduced by Marica is applied to solve linear and nonlinear boundary value problems both for fourth-order integro-differential equations. The following analysis is accompanied by numerical examples whose results show that the Optimal Homotopy Asymptotic Method is highly accurate, convenient and relatively efficient for solving fourth order integro-differential equations.

References

solving the nonlinear Fredholm integral equations of the second kind, Applied Mathematics and Computation, 724–735.


**Index Terms**

Computer Science  
Applied Mathematics

**Keywords**

Fourth Order Integro-differential Equations  
Boundary Value problem  
Optimal Homotopy Asymptotic Method.