ON ADOMIAN DECOMPOSITION METHOD FOR SOLVING GENERAL WAVE EQUATIONS ON TRANSMISSION LINES

M. O. Oke

Department of Mathematical Sciences, Ekiti State University, P.M.B. 5363 Ado – Ekiti, **NIGERIA**

ABSTRACT

Adomian decomposition method is an efficient numerical scheme that provides a very good potential for the solution of physical applications that are modelled by non-linear differential equations. The method takes the form of a convergent series with easily computable components. In this paper, we applied the method to solve the general wave equations on transmission lines.

Keywords: Adomian Decomposition Method, Wave equations, Transmission lines, Adomian Polynomials.