

**LEGENDRE SERIES SOLUTION OF FREDHOLM
INTEGRAL EQUATIONS**

O. TALABI

Department of Mathematical Sciences, University of Agriculture , Abeokuta, Nigeria.

ABSTRACT

This paper focuses on a matrix for solving certain linear Fredholm integral equation of the second kind via the use of Legendre series approximation. The method involves putting matrix equivalents of the Legendre series expansions of the functions in the equations containing unknown Legendre coefficients. The result obtained was compared with that obtained by other authors who used Chebyshev polynomials.