

*One Day Conference on Ordinary Differential Equations & Inverse Problems
November 27, 2006, IKIU, Qazvin*

Sigmoidal Transformations for Solving Cauchy Singular Integral Equations

D. Rostamy
IKIU
Qazvin, Iran

In this lecture, we are concerned with generalized airfoil equation, which contains both the particular Hadamar finite-part and the Cauchy principal value integrals. By the use of Sigmoidal transformations and results of Lyness concerning the Euler-Maclaurin expansion has shown that good approximations can be found for this equation. We also present some numerical examples.