

# **An efficient interval symmetric single step procedure ISS1-5D for simultaneous bounding of real polynomial zeros**

## **ABSTRACT**

A new modified interval symmetric single-step procedure ISS1-5D which is the extension from the previous ISS1 is proposed. In procedure ISS1 we define informational efficiency of a method as the higher R-order of convergence evaluation. The procedure is tested on five test polynomials and the results are obtained using MATLAB 2007 software in association with IntLab V5.5 toolbox to record the CPU times and the number of iterations.

**Keyword:** Analysis interval; Convergence; CPU times; Zeros of a polynomial.