The interval zoro-symmetric single-step procedure IZSS2-5D for the simultaneous bounding of simple polynomial zeros

ABSTRACT

This paper describes the Interval Zoro-Symmetric Single-Step Procedure IZSS2-5D which is an extension of the previously proposed procedure IZSS2. It is also an extension of our procedure ISS2-5D. This procedure is developed in order to enhance the rate of convergence. Numerical results are obtained and they indicated that the IZSS2-5D outperformed the ISS2-5D in terms of computational time and number of iterations.

Keyword: Interval analysis; Interval procedure; Polynomial zeros; Simultaneous inclusion