MENU

SIGN IN

AIP
Conference Proceedings

HOME   BROWSE   MORE ▾

‹ PREV   NEXT ›

Active and passive symmetrization of Runge-Kutta Lobatto IIIA methods

A. Gorgey
- Department of Mathematics, Faculty of Science and Mathematics, Universiti Pendidikan Sultan Idris, 35900 Tanjung Malim, Perak, Malaysia

R. P. K Chan
- Department of Mathematics, University of Auckland, 1010 Auckland Central, New Zealand
more...

KEYWORDS

Ordinary differential equations

ABSTRACT

Symmetrization of the Runge-Kutta Gauss methods have been shown to be robust in solving stiff linear and nonlinear initial value ordinary differential equations [4]. The most efficient way of applying symmmetrization was found to be passive symmetrization with passive extrapolation. In this paper we investigate symmetrization of the Lobatto IIIA methods. We show numerically that the same strategy of using passive symmetrization applied with passive extrapolation of the Lobbatto IIIA methods is also most efficient in solving the nonlinear problems tested.

Resources

AUTHOR

LIBRARIAN

ADVERTISER

⤓ PDF