

The Development of a New Block Method for Solving Stiff ODEs

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Abstract : We develop and demonstrate a computationally efficient numerical technique to solve first order stiff differential equations. This technique is based on block method whereby three approximate points are calculated. The Cholistani of varied step sizes are presented in divided difference form. Stability regions of the formulae are briefly discussed in this paper. Numerical results show that this block method perform very well compared to existing methods.

Keywords : block method, divided difference, stiff, computational

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