

Review of: "New Computational Methods Using Seventh Derivative Type for the Solution of First Order Initial Value Problems"

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Potential competing interests: No potential competing interests to declare.

In this article, the authors develop a continuous implicit seventh-eighth method using interpolation and collocation of the approximate solution for solving y=f(x,y) with a constant step-size. The method employs power series as the approximate solution in its derivation. The independent solution is then derived by adopting a block integrator. The properties of the method are investigated and found to be zero stable, consistent, and convergent. The article introduces innovations in the formulation of equations through power series. Additionally, it provides a large number of examples to test the approximation of the solution and the stability of the method. I believe the text fits the journal, and after minor corrections, it can be accepted for publication.

Minor errors:

Page 1: ill-conditioned. To unveil the nature of stiffness of the -> Therefore, it is ill-conditioned. To unveil the nature of stiffness of the

Page 4

Section two gives -> Section 2 gives, (the same for all occurrences in the paragraph) , i = 1, ..., k -> , i = 1,...,k Where, -> where

Page 5

The equation (21 has no motivation; it appeared out of nowhere.

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are said to be zero stable if no root of the first -> are said to be zero stable if no root of the first