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

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1 Say Yes to Education

Potential competing interests: No potential competing interests to declare.

Reviewers' Comments

Title of Paper: New computational methods using seventh derivative type for the solution of first order initial value problems

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I have gone through the manuscript in a fairly detailed fashion. In this work, the authors study a class of implicit block methods of the seventh derivative type through interpolation and collocation techniques using finite power series as the basis functions. The findings are positive and promising, and it appears that the research followed accepted scientific procedures. Furthermore, I would like to draw attention to the following issues:

1) At the end of all equations, "COMMA" or "POINT" must be added according to the typing rules.

2) Motivation is not sufficiently stated in the introduction part. It should be clarified why they consider this problem.

3) Highlight the main novelty of this paper and the significance of the results.

4) Authors should better explain the advantages (also disadvantages) of the present method over other methods.

5) Complexity: Please give some theoretical analysis of the time complexity of the current paper.

6) The conclusion part of the manuscript can be developed, and more explanation about the results can be added.

7) The authors should refer to this work more carefully and should update some of the listed references in their paper in order to add power to the paper.

8) Please check the entire manuscript carefully regarding the above-mentioned suggestions.

Finally, the topic content of this paper aligns with the goals of your journal, so my recommendation is to accept the manuscript after minor changes.