

# Review of: "A Novel Computational Approach for Solving Fully Implicit Singular Systems of Ordinary Differential Equations"

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Potential competing interests: No potential competing interests to declare.

In this manuscript, the results of this research are conveyed thoughtfully and completely, and they are consistent with the experimental findings. This work is worthwhile to be publish in this journal after **minor revision**. The following issues should be addressed:

- 1) Could you provide more details about the specific challenges associated with solving fully implicit singular nonlinear systems of ordinary differential equations?
- 2) How does the differential transform method (DTM) directly address the challenges of these systems, and what is the role of ADM polynomials in your method?
- 3) It's mentioned that your technique does not require transforming the implicit system into an explicit differential system. Could you explain how this property simplifies the problem-solving process and why it is advantageous?
- 4) In the context of your work, what are the typical values of  $k$  in the summation of Equations (7) and (8)? How does the choice of  $k$  impact the accuracy and convergence of your method?
- 5) Are there any limitations or practical considerations when using the ADM polynomials and the differential transform method for solving fully implicit singular nonlinear systems? What types of problems are best suited for this approach?
- 6) Maybe the author should compare their results clearly with other reported works, highlighting the advantage and disadvantages.
- 7) The authors are responsible for the English, which should be polished throughout the manuscript to clear some minor typo/grammar errors.