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.

Comments on “A Novel Computational Approach for Solving Fully Implicit Singular Systems of Ordinary Differential Equations”

In this paper, a novel computational approach is used to solve the fully implicit singular nonlinear systems of ordinary differential equations. These problems cannot be solved directly by traditional methods and common numerical software. The authors applied the differential transform method based on the Adomian polynomials, which leads to equations that can be solved efficiently. To illustrate the capability and efficiency of the proposed algorithm, several numerical examples are provided. The paper is somehow interesting and contains novel numerical algorithms. I recommend it for publication if the following issues are revised.

1. In the introduction, the authors mentioned some numerical methods. However, they do not discuss the advantages and disadvantages of these methods.
2. Some important methods for these kinds of problems are missing, such as the meshless methods (i.e., method of fundamental solutions, backward substitution method, etc.). The authors should cite and discuss these methods.
3. In the conclusion, the advantages of this method should be emphasized.
4. If possible, the authors should discuss their method with the existing methods for the same problems, and comparisons can also be given.