

## Review of: "On a New Two-Point Taylor Expansion With Applications"

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Potential competing interests: No potential competing interests to declare.

Report on the Manuscript: ON A NEW TWO POINT TAYLOR EXPANSION

WITH APPLICATIONS

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This manuscript is dedicated to presenting a new two-point Taylor series expansion. The expansion is slightly different than the classical definition. The coefficients are calculated as recursive relations in a general form. The two-point Taylor expansion is applied to expressing two different functions, one of which has a finite interval of convergence and the other an infinite interval of convergence. Results of the new expansion are compared with the single-point Taylor expansions as well as the classical two-point Taylor expansion. The new two-point expansion and the classical two-point expansion produced identical results for the problems treated. An application of the series to the solution of a variable coefficient differential equation is also treated. In a word, I would suggest the authors consider the following minor corrections in their final revised version of the manuscript.

- 1. The title should be more attractive.
- 2. The abstract should be more prominent, in which the author should include important findings.
- 3. In section 3, in subsection 3.1, the author should write the function instead of y=1/1+x
- 4. All the figures in the manuscript should be colored, and the thickness of the plots should increase.
- 5. The format of references is not uniform.

 $y = \frac{1}{1+x'}$