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

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In this paper, the author suggests a new two-point Taylor series expansion. The coefficients are calculated as recursive relations in a general form. The two-point Taylor expansion is applied to express two different functions.

This work describes how we can approximate a function by the best Taylor series. But the problem here is how to choose the two points, x0 and x1, for each function. In general, we do not have an exact solution. So how can we choose these points? The approximation depends on the form of the function to be approximated. The author uses only two kinds of functions. What if we take a linear function or a cubic function? The good thing in this work is that if the two selected points are far from each other, then the single convergence interval can be divided into two parts.

The second question is, what about the functions that are not analytic?

The calculation of the coefficients is very time consuming.

I think the work is very interesting, but it needs different examples to analyze the general results.