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

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Potential competing interests: No potential competing interests to declare.

- In this paper, a new two-point Taylor expansion is introduced, which differs slightly from known ones. In the second chapter, a recursive formula for the calculation of the related coefficients is derived, which is based in the usual way on derivatives of the function in question. The following proof of the uniqueness of these coefficients is not clear, but obviously it is not necessary because the calculation formula can be seen as a proof of uniqueness. It is obvious that such a Taylor expansion should converge in the neighbourhood of the expansion points, and a good mathematical paper would discuss the convergence and divergence of the expansion. The present paper only gives simple examples in the third chapter. The discussion of the first example uses letters p_n that are not explained sufficiently, and the sets of divergence are not discussed. In the last chapter, an almost trivial example of a differential equation is considered. No general discussion of the possibilities to use these two-point expansions for differential equations is given.
- According to the opinion of the referee, the very small mathematical content of this paper does not justify publication.