Review of: "Taylor Series Based Domain Collocation Meshless Method for Problems with Multiple Boundary Conditions including Point Boundary Conditions"

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Potential competing interests: No potential competing interests to declare.

I tried to review the detail works of the manuscript and observed that it is well written and rigor in scientific era involving PDEs. The cost of inaccuracy in numerical analysis is reduced via meshless computational methods. The difficulty level of such works is occurred in cases of complicated domains involving points of discontinuity. In the present manuscript, it is proposed that the method is applicable to solve homogeneous and non-homogeneous PDEs, and other complex PDEs as well. I appreciate the author for his work nicely. However, I have the following few comments and suggestions.

1. The keywords are not written uniformly, some capitalized and some are not. Revise it please.
2. Some grammatical errors or repeated or unnecessary words are seen in the manuscript. For instance, in the introduction section, paragraph 1, line 8, … “mathematical PDE problem”, no need of saying problem. In line 13, it is better to write ” analytical" as “analytically” for more sentence coherence. Under acknowledgment, “…thankfully…” is better if replaced by “thankful”. The author expected to revise such form of errors in the manuscript for more quality.
3. The use of punctuation (full stop, comma, brackets…) also should be revised. For instance, look at: paragraph 2, line 11, “…boundary.FDM….”, space needs there. Under section 2, paragraph 1, line 3, “…collocation”, end it with full stop. Also check that most equations are not ended with full stop. Check such form of errors through out the manuscript.
4. it is recommended to include statement of the problem and the governing equation to be solved by the meshless method proposed in the manuscript.
5. The author suggested that the proposed method is useful to solve complex PDEs. Can we apply this method to PDEs like Navier-stoke equations, well known in fluid mechanics involving perturbation parameter due to large Reynold number? If it is possible how do this method handle the rapidly changing behavior of the boundary layers?
6. What difference and relations one can observe from the analytical and computed results simulated graphically?
7. Do the author tell us the cause of errors and residual of the PDE in the proposed method?
8. In the comparison given in Table. 1, how do the readers understand that the proposed method is more accurate that TMM. Comparing negative maximum errors do not give sense?