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.

The manuscript investigates the intriguing meshless method of Taylor series-based domain collocation and focuses on its application to problems with multiple constraints, including point constraints. The primary utility of the method in conduction problems is a promising perspective that generates interest in its broader applicability.

1. The manuscript rightly focuses on solving phenomena characterized by smooth variations and fluctuations. This property leads to considerations about the adaptability of the method to scenarios such as wind flowing through a turbine, where fluid dynamics often involve complicated and dynamic patterns.
2. While the presented method is promising, a more robust evaluation could be achieved by incorporating more complex problems. In particular, the authors could explore scenarios involving Neumann boundary conditions with a constant boundary, in- and out-of-domain sources, and complicated geometries. This would increase the credibility of the method and demonstrate its versatility.
3. An essential aspect that deserves attention is the runtime of the program, particularly in a 100x100 domain. A comparative analysis against existing numerical methods would provide valuable insights into the method's computational efficiency, aiding researchers in choosing suitable tools for their specific needs.
4. A strength of research lies in comparison with analytical methods. This is a crucial metric that adds significant value to the results. The manuscript could further explain the nature of this comparison and its implications for validating the accuracy and reliability of the method.

Finally, the manuscript presents a compelling investigation of the meshless method of Taylor series-based domain collocation. While I applaud its application to line problems, I recommend expanding the study to more complex scenarios for a comprehensive evaluation. Furthermore, a detailed analysis of the program duration and a thorough comparison with analytical methods enhance the manuscript's contribution to the field.