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| Journal Name: | [Asian Journal of Pure and Applied Mathematics](https://www.jofmath.com/index.php/AJPAM) |
| Manuscript Number: | **Ms\_AJPAM\_1910** |
| Title of the Manuscript: | **Numerical Analysis of Magnetohydrodynamics of Casson nanofluid flow over a rotating disk from Mathematical Physics Perspective** |
| Type of the Article |  |

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| **PART 1: Comments** |
|  | **Reviewer’s comment****Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript presents a detailed numerical analysis of magnetohydrodynamic (MHD) flow of a Casson nanofluid over a rotating disk, incorporating a mathematical physics perspective. Such studies are crucial for advancing our understanding of non-Newtonian fluid behaviour in the presence of magnetic fields, which has significant implications in industrial applications such as cooling technologies, chemical processing, and biomedical engineering. By integrating nanofluid dynamics with Casson fluid properties and rotational effects, the work contributes valuable insights into complex transport phenomena. The findings can serve as a foundationfor future experimental and theoretical research in the field of fluid mechanics and applied mathematics. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | yes |  |
| **Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.** | The Abstract should be REWRITTEN and include the actual work done, methodology, important results, validation of results remarks and the percentage of increase or decrease of gradients of essential parameters. Also, include source parameters and important results. Provide novelty in detailed. The main finding and its significance should be included in the abstract. |  |
| **Is the manuscript scientifically, correct? Please write here.** | yes |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | Some past studies about this topic should be mentioned in the introduction for instance:1. [https://doi.org/10.18311/jmmf/2023/36269.](https://doi.org/10.18311/jmmf/2023/36269)
2. [https://doi.org/10.1007/978-3-031-69970-2\_27.](https://doi.org/10.1007/978-3-031-69970-2_27)
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| **Is the language/English quality of the article suitable for scholarly communications?** | yes |  |
| **Optional/General** comments | 1. Author must include the convergence and residual error table.
2. Nomenclature section should be added?
3. The schematic of the physical model needs modification.
4. The quality of the graphs should be improved. The values on the axis are not visible.
5. Please improve the conclusion section.
6. Added the reference of the governing equations and boundary conditions.
7. Check the entire manuscript for spelling errors and grammatical mistakes.
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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?**  | *(If yes, Kindly please write down the ethical issues here in details)* |  |

**Reviewer details:**

**Ramya N, Karpagam Academy of Higher Education, India**