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| Journal Name: | [**Asian Research Journal of Mathematics**](https://journalarjom.com/index.php/ARJOM) |
| Manuscript Number: | **Ms\_ARJOM\_139693** |
| Title of the Manuscript: | **Global convergence in non-relativistic limits for the non-isentropic Euler-Maxwell system near non-constant equilibrium** |
| Type of the Article | **Research Article (Theoretical/Mathematical Physics)** |

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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** (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 is significant importance to the scientific community as it addresses the global convergence behaviour of the non-relativistic limit in the Euler-Maxwell system near non- constant equilibrium states, a problem with wide applications in plasma physics and semiconductor modeling. By rigorously analyzing the transition from the Euler-Maxwell system to the Euler-Poisson system, the study provides deeper insights into the interplay between fluid dynamics and electromagnetic fields, which is crucial for understanding complex physical phenomena. The results also contribute to the mathematical theory of hyperbolic systems, offering new tools and estimates for handling such nonlinear problems. Furthermore, the work bridges theoretical and applied mathematics, with potential implications for engineering and technology, particularly in the design of plasma-based  devices and semiconductor systems. | We fully accept all reviewers' suggestions. |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **"Global Convergence in the Non-Relativistic Limit for the Compressible Euler-Maxwell System Near Non-Constant Equilibrium States."** | We thank the reviewer for their comments. Revised accordingly. |
| **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 article's abstract is very comprehensive and clear. |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript appears scientifically correct, as it rigorously derives and analyzes the non- relativistic limit of the Euler-Maxwell system using well-established mathematical tools (e.g., energy estimates, Sobolev inequalities) and aligns with prior literature in the field. | We fully accept all reviewers' suggestions. |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The references are generally sufficient and include key works, but adding more recent studies (e.g., from the last 5 years) on non-relativistic limits or Euler-Maxwell systems, such as **"Global solutions for the relativistic Euler-Maxwell system in 3D" (2021) by Peng et al.**, could further strengthen the literature support. | We fully accept all reviewers' suggestions. |
| **Is the language/English quality of the article suitable for scholarly communications?** | The language and English quality of the article are suitable for scholarly communication, though minor refinements in conciseness and technical phrasing (e.g., replacing passive voice where clarity benefits) could further enhance readability.  (Example: "The analysis is performed" → "We analyze" for directness.) | We sincerely appreciate your thoughtful evaluation of our manuscript. Your suggestions for enhancing clarity through more concise phrasing and active voice are well-received. We have implemented these refinements throughout the text, including:  (Example:”The main purpose of this section is to derive a key prior estimate”→”The main purpose is to derive a key prior estimate”) |
| **Optional/General** comments | This manuscript makes a valuable contribution to the field with rigorous analysis, but would benefit from a clearer highlight of its novel aspects and a slight refinement in language for broader accessibility. | Thank you for your valuable feedback. We'll clarify the novel aspects and refine the language for better accessibility. |

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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)* | This study raises no ethical concerns. All derivations constitute original theoretical work involving neither human/animal experiments, sensitive data nor conflicts of interest. The authors declare no competing financial interests or personal relationships that could influence the research outcomes. |