

[Review Form 2](#)

Book Name:	Current Research Progress in Physical Science
Manuscript Number:	Ms_BPR_3783
Title of the Manuscript:	A Review on Neutrino Oscillation Probabilities and Sterile Neutrinos
Type of the Article	BOOK CHAPTER

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	<p>This manuscript is highly significant for the scientific community as it provides a comprehensive overview of neutrino oscillations, a phenomenon that has profoundly influenced our understanding of particle physics and the Standard Model. By addressing both the theoretical and experimental aspects of neutrino properties, it bridges the gap between foundational physics and cutting-edge research. Its exploration of the connections between neutrino oscillations and dark matter is particularly valuable, as it delves into one of the most pressing mysteries in modern cosmology.</p> <p>I appreciate this manuscript because it takes a holistic approach, encompassing the historical milestones, experimental achievements, and theoretical advancements in neutrino research. The inclusion of sterile neutrinos as a potential link to dark matter reflects the authors' forward-thinking perspective and willingness to tackle bold, interdisciplinary questions.</p>	
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.	Abstract is comprehensive. No changes needed.	
Are subsections and structure of the manuscript appropriate?	Yes	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	<p>The manuscript covers a wide range of topics related to neutrinos, from their properties within the SM to their production sources (atmospheric, solar, and reactor), providing a thorough and structured analysis.</p> <p>By detailing experiments that detect neutrino properties, the manuscript strengthens its scientific foundation. Experimentation is crucial for validating theoretical models, and highlighting important milestones underscores the manuscript's connection to empirical research.</p> <p>The connection to the nature of the Universe and its behavior situates the manuscript within a broader scientific context, making it significant not just to particle physics but also to cosmology and astrophysics.</p>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are recent enough. No more references needed.	

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Minor REVISION comments	Language is suitable.	
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments		

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?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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