#### 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

#### PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback ( part in the manuscript. his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why doyou like (or dislike) this manuscript? A minimum of 3-4sentences may be required for this part.	This manuscript is a review on Neutrino Oscillation Probabilities and Sterile Neutrinos. Neutrino Oscillation is a very interesting phenomenon and provides information about the effective mass of neutrino, infact mass square difference of the mass eigen states. This manuscript also contains informationabout sterile neutrinos which do not have weak interaction, so called fourth neutrino. So the content of themanuscript is very interesting and provides useful information about neutrinos.	
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 thissection? Please write your suggestions here.	Abstract is comprehensive.	
Are subsections and structure of the manuscriptappropriate?	They are appropriate.	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think thatthis manuscript is scientifically robust and technicallysound? A minimum of 3-4 sentences may be required for this part.	Since, the manuscript is based on review, so some extra information must be added to make it more informative. The authors talk about mixing angles and $\Delta m$ , $\Delta m^2$ but do not discuss latest findings. The $21  31$ latest results must be added. Also when they talk about solar and atmospheric neutrinos and mass square differences, they should also discuss about mass ordering and hierarchies especially normal and invertedmass hierarchies. So one or two paragraphs about mass ordering or hierarchies must be added.	
Are the references sufficient and recent? If you havesuggestions of additional references, please mention them in the review form.	References are ok.	
Minor REVISION comments		
Is the language/English quality of the article suitablefor scholarly communications?	It is ok	
Optional/General comments	<ul> <li>There are two typographical mistakes, I have found.</li> <li>(i) Page 421, line no. 16superposition if left handed states →superposition of left handedstates</li> <li>(ii) Equation 16. VαL = Σ<sub>I=</sub><sup>N</sup> 1 UαiviL → VαL = Σ<sup>N</sup> 1 Uαi ViL</li> </ul>	

(Please correct the manuscript and highlight that ot. It is mandatory that authors should write		

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## PART 2:

		Author's comment (if agree that part in the manuscript. It feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

### **Reviewer Details:**

Name:	Kaushlendra Chaturvedi
Department, University & Country	Siddharth University, India

## eed with reviewer, correct the manuscript and highlight It is mandatory that authors should write his/her