# 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<br>part in the manuscrip<br>his/her feedback here |
|---|--|---|
| Please write a few sentences regarding the importance<br>of this manuscript for the scientific community. Why do<br>you like (or dislike) this manuscript? A minimum of 3-4<br>sentences may be required for this part.                           | Neutrinos are a quasi-elusive particle, are spin ½ fermions, more precisely leptons, they are an elementary particle of the standard model of particle physics. detecting and studying neutrino oscillations can be used to consolidate the standard model of particle physics. Indeed studying and understanding neutrino oscillations can also help to understand and detect dark matter   |   |
| Is the title of the article suitable?<br>(If not please suggest an alternative title)   | The title of the article is appropriate  |   |
| Is the abstract of the article comprehensive? Do you<br>suggest the addition (or deletion) of some points in this<br>section? Please write your suggestions here.   | Yes The summary of the article is exhaustive   |   |
| Are subsections and structure of the manuscript appropriate?  | The subsections and the structure of the manuscript are they appropriate   |   |
| Please write a few sentences regarding the scientific<br>correctness of this manuscript. Why do you think that<br>this manuscript is scientifically robust and technically<br>sound? A minimum of 3-4 sentences may be required<br>for this part. | Neutrinos are spin ½ fermions, more precisely leptons, they are an elementary particle<br>of the standard model of particle physics. They are electrically neutral, that interacts via<br>the weak interaction and gravity. There are three "flavors": electron neutrino, muon<br>neutrino, tau neutrino. The rest mass of the neutrino is much smaller than that of the<br>other known elementary particles (excluding massless particles). Indeed the study of<br>neutrino oscillations and sterile neutrinos could explain some mysteries of the<br>Universe, such as the presence of matter. |   |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.   | The references is sufficient and recent  |   |
| Minor REVISION comments   |  |   |
| Is the language/English quality of the article suitable for scholarly communications?   | The English quality of the article is suitable for scientific communications   |   |
| Optional/General comments   |  |   |

| Please correct the manuscript and highlight tha<br>It is mandatory that authors should write |  |  |  |  |
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# Review Form 2

# PART 2:

|  | Reviewer's comment  | Author's comment (if agreed<br>highlight that part in the manu-<br>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:**

| Name:                            | Kerkour –El Miad Abdelhamid        |
|----------------------------------|------------------------------------|
| Department, University & Country | Mohammed First University, Morocco |

d with reviewer, correct the manuscript and uscript. It is mandatory that authors should write