**Editor's Comment:** 

I accept the manuscript for publication in the BP International.

Considering the reviewers comments and authors corrections, we can publish this manuscript.

The reasons are as follows:

1- One reviewer gives comments such as "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"

2- One reviewer gives comment such as" 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, in fact mass square difference of

the mass eigen states. This manuscript also contains information about sterile neutrinos which

do not have weak interaction, so called fourth neutrino. So, the content of the manuscript is

very interesting and provides useful information about neutrinos"

3- Two reviewers give comment such as "Accept as it is"

4- One reviewer gives comment such as "Accept after minor revision".

According to the comments, the authors have corrected the manuscript carefully. Therefore,

the manuscript has enough value for publication in the BP International.

**Editor's Details:** 

Prof. Magdy Rabie Soliman Sanad

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National Research Institute of Astronomy and Geophysics, Egypt.