



Contribution ID : 850

Type : Oral talk

Effect of sterile phases on degeneracy resolution capabilities of LBL experiments

Friday, 9 October 2020 12:45 (15)

In sterile neutrino (3+1) parameterisation, we observe that sterile phases (δ_{14}, δ_{24}) are always together in oscillation probability, even when the MSW effect is considered. We see that the difference between the sterile phases has a more dominating effect over event rates compared to small variations due to changes in individual values. In this work, we show the value of sterile phase difference ($\delta_{14} - \delta_{24}$), least effects the parameter degeneracy resolution of δ_{13}, θ_{23} at long-baseline experiments. We find the value of sterile phase difference that will give a greater chance at sterile neutrino discovery.

Primary author(s) : Mr. CHATLA, Akshay (University Of Hyderabad); Prof. BAMBAH, Bindu (University Of Hyderabad)

Presenter(s) : Mr. CHATLA, Akshay (University Of Hyderabad)

Session Classification : Neutrino Physics

Track Classification : Neutrino physics