XXV DAE-BRNS High Energy Physics Symposium 2022



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Linear seesaw in modular S_3 symmetry with leptogenesis

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We usually give importance to discrete symmetries, which helps us to investigate neutrino phenomenology. So, in here we consider a very simple permutation symmetry group i.e. S_3 to examine neutrino masses and mixing in the linear seesaw framework. To our help we have introduced modular symmetries which are advantageous in avoiding the requirements of multiple flavon fields which in return helps to keep away the intricacies of vacuum alignments. In this way we endeavor to clarify the effect and significance of modular S_3 symmetry which is considered in explaining the neutrino mixing viable with the current observations. We additionally talk about the non-zero reactor mixing angle and attempt to oblige the model parameters accordingly, also, discuss about leptogenesis briefly.

Session

Neutrino Physics

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