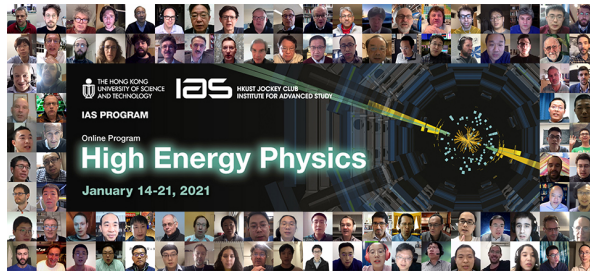


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CALCULATING CP INVARIANCE USING WEAK BASIS INVARIANTS IN HYBRID TEXTURES OF NEUTRINO MASS MATRIX

In the present analysis, I have constructed the CP odd weak basis invariants (WB) at low energies, for Majorana neutrino mass matrix having a condition of two zeros and an equality between arbitrary non-zero elements in the flavor basis, where charged lepton mass matrix is diagonal. This particular form of neutrino mass matrix, also known as hybrid texture, is found to be viable with the current experimental data, as shown by S. Dev and D. Raj[1] in their recent work. In this analysis, I compute the necessary and sufficient condition for leptonic CP invariance for each of the viable possibility of hybrid texture, and subsequently find some important implications regarding the leptonic CP properties.

[1] S. Dev and D. Raj, Nuclear Physics B 957 (2020) 115081

Scheduling Preferences

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