

Limits on the Dipole Moments of the ν_τ and energy scale f induced in a simplest little Higgs model

Using as an input the data obtained by the L3 Collaboration for the reaction $e^+e^- \rightarrow \bar{\nu}_\tau \nu_\tau \gamma$, we obtained limits on the electromagnetic dipole moments of the tau-neutrino in the context of a Simplest Little Higgs Model (SLHM). Our bounds on the electromagnetic moments are consistent with the bounds obtained by the L3 Collaboration for the reaction $e^+e^- \rightarrow \bar{\nu}_\tau \nu_\tau \gamma$. In addition, we obtained a limit on the characteristic energy scale of the model: $f \geq 5.5$ TeV, which is competitive with those reported in the literature. Our work complements other studies on the electromagnetic dipole moments of the tau-neutrino and on the characteristic energy scale of the model f .

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