Feynman rules in the Lorentz violating extension of the standard model

A Binandeh and M Haghighat
Department of Physics, Isfahan University of Technology, Isfahan Iran

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Abstract
We consider the Lorentz violating extension of the standard model introduced by D. Colladay and V. A. Kostelecky. In this framework, we obtain all Feynman rules for the electroweak part of the standard model extension (SME), for the first time. Among the new obtained interactions one finds new vertices for the Higgs boson that is interesting in the phenomenology of the Higgs particle.

Keywords: Lorentz symmetry, CPT symmetry, Feynman rules, standard model