

Simulation of the Large Hadrons Collisions Using Monte Carlo Tools

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Abstract : In many cases, theoretical treatments are available for models for which there is no perfect physical realization. In this situation, the only possible test for an approximate theoretical solution is to compare with data generated from a computer simulation. In this paper, Monte Carlo tools are used to study and compare the elementary particles models. All the experiments are implemented using 10000 events, and the simulated energy is 13 TeV. The mean and the curves of several variables are calculated for each model using MadAnalysis 5. Anomalies in the results can be seen in the muons masses of the minimal supersymmetric standard model and the two Higgs doublet model.

Keywords : Feynman rules, hadrons, Lagrangian, Monte Carlo, simulation

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