Contribution ID : **126** Type : **not specified**

Null test searches for BSM physics with rare charm decays

Content

Rare $|\Delta c| = |\Delta u| = 1$ processes complement flavor searches in the down-sector in a unique way. Semileptonic FCNC decays of charmed hadrons offer a large set of clean null test observables, such as CP-asymmetries, lepton-universality ratios, missing energy modes, lepton flavor violating modes and angular observables. In these observables any signal cleanly indicates Physics Beyond the Standard Model. Along with sizable charm production rates at current flavor facilities, null test searches provide a formidable road to the discovery of New Physics. We present an overview of null test opportunities with rare charm decays and give sensitivties in model-independent analyses of New Physics contributions.

Summary

Primary author(s) : Mr. GOLZ, Marcel (TU Dortmund)

Presenter(s) : Mr. GOLZ, Marcel (TU Dortmund)