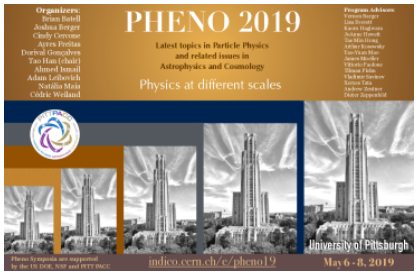

Contribution ID: **758** Type: **parallel talk**

Understanding charm CP

Tuesday 7 May 2019 16:30 (15 minutes)

Recently LHCb announced the exciting discovery of direct CP asymmetry in D0 decays to K-pairs and pion pairs around 15X10ˆ-4. It is extremely difficult to do reliable calculations for the expectations from the SM for these asymmetries because of large non-perturbative effects. However, a mechanism will be proposed to helps us understand roughly the size of the asymmetry and the key idea readily leads to several testable predictions. Moreover, even though the original amplitudes for Dˆ0 => hˆ+ hˆ- are extremely difficult to handle on the lattice using known techniques, many features of the idea being proposed here may well be amenable to lattice simulations.

Summary

Recent LHCb discovery of direct CP asymmetry in charm decays will be discussed

Author: SONI, AMARJIT (BNL)

Presenter: Dr SONI, Amarjit (Brookhaven National Laboratory)

Session Classification: Flavor II