



Contribution ID: 339

Type: Talk

Lattice calculation of hadron spectrum including isospin breaking effect

Thursday, 1 August 2024 11:30 (20 minutes)

We develop a new method to calculate hadron spectrum including isospin breaking effect on lattice, where we treat u and d quark mass splitting and QED effect perturbatively. In this method we define a new value related to a certain hadron mass. This value is irrelevant to quark mass to the first order so that the renormalization of quark mass is no longer needed. We apply this method on a real lattice calculation and give mass splittings of several hadrons.

Primary author: Mr LU, Chenfei (Peking University)

Presenter: Mr LU, Chenfei (Peking University)

Session Classification: Hadronic and nuclear spectrum and interactions

Track Classification: Hadronic and Nuclear Spectrum and Interactions