



Contribution ID: 407

Type: **Talk**

long distance part of ϵ_K from lattice QCD

Thursday, 28 July 2016 17:30 (20 minutes)

We demonstrate the lattice QCD calculation of the long distance contribution to ϵ_K . Due to the singular, short-distance structure of ϵ_{long} , we must perform a short-distance subtraction and introduce a corresponding subtraction term determined from perturbation theory, which we calculate at Next Leading Order (NLO). We perform the calculation on a $24^3 \times 64$ lattice with a pion mass of 329 MeV. This work is a complete calculation, which includes all connected and disconnected diagrams.

Primary author: Mr BAI, Ziyuan (Columbia)

Presenter: Mr BAI, Ziyuan (Columbia)

Session Classification: Weak Decays and Matrix Elements

Track Classification: Weak Decays and Matrix Elements