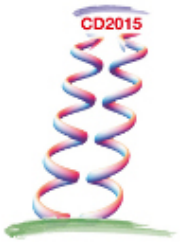

Contribution ID: **100** Type: **Talk**

K-pi scattering lengths from lattice QCD

Monday 29 June 2015 17:20 (20 minutes)

We present the recent lattice QCD calculation of K-π I=3/2 and I=1/2 scattering lengths by the RBC-UKQCD collaboration. Our calculation is the first lattice calculation of these quantities performed using physical point ensembles [1]. This allows us to bypass the error due to chiral extrapolation, which in current calculations is the dominant source of systematic errors [2,3,4,5]. Preliminary results are presented and compared to those from earlier studies which were obtained at heavier pion masses and extrapolated to the physical point.

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Session Classification: Parallel Session 2 - Goldstone Boson WG

Track Classification: Goldstone Boson Working Group