

Charmed (and heavier) meson decay constants and heavy neutral meson mixing in the continuum limit using 2+1f of domain wall fermions

Thursday, July 26, 2018 9:30 AM (20 minutes)

I will present a status update of RBC/UKQCD's charm (to bottom) physics program based on ensembles with $N_f = 2 + 1$ flavours of domain wall fermions featuring physical pion masses.

After a brief review of our program, the main focus will be on mesonic decay constants and neutral meson mixing in the charm and bottom sector, where results for the bottom sector are obtained from an extrapolation from the (heavier than) charm-quark mass region to the physical b -quark mass. In particular, I will focus on the ratio of the pseudo-scalar decay constants f_{D_s}/f_D and on the extrapolation of the ratio ξ to the b -quark mass.

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