

The B Meson Decay Constant in Full QCD

Presenter: Junko Shigemitsu

J.Shigemitsu, A.Gray, M.Wingate, C.Davies, E.Gulez, P.Lepage, Q.Mason, M.Nobes, H.Trottier

Abstract: We present determinations of the B meson decay constant f_B and of the ratio f_{B_s}/f_B using the MILC collaboration dynamical configurations with $N_f = 2 + 1$. The heavy b quark is simulate using Nonrelativistic QCD and both the valence and sea light quarks are represented by the highly improved (Asq-Tad) staggered quark action. The good chiral properties of the latter action allow for a smooth chiral extrapolation to physical *up* and *down* quarks.