



Contribution ID: 364

Type: **Talk**

B-physics with domain-wall light quarks and nonperturbatively tuned relativistic b-quarks

Wednesday, 25 June 2014 09:40 (20 minutes)

We compute B-meson decay-constants and neutral B-meson mixing using relativistic b-quarks and domain-wall light quarks. We present results for f_B , f_{B_s} , and their ratio including a complete systematic error budget from an analysis of five sea-quark ensembles with pion masses as light as ~ 290 MeV and two lattice spacings of $a \sim 0.11$ and 0.08 fm. We are currently adding data at the physical pion mass using the M^{oebius} domain-wall ensemble with $a \sim 0.11$ fm recently generated by the RBC and UKQCD collaboration in order to reduce the dominant systematic uncertainty from the chiral extrapolation. We also report on progress on our calculation of the B-mixing matrix elements.

Primary author: WITZEL, Oliver (Boston University)

Presenter: WITZEL, Oliver (Boston University)

Session Classification: Weak Decays and Matrix Elements

Track Classification: Weak Decays and Matrix Elements