32nd International Symposium on Lattice Field Theory (Lattice 2014)



Contribution ID: 293

Type: Talk

## **Gradient Flow Analysis on MILC HISQ Ensembles**

Tuesday, 24 June 2014 14:55 (20 minutes)

We present a final analysis of gradient flow and the associated scale  $w_0$  measured on the  $N_f = 2 + 1 + 1$  HISQ ensembles. Compared to previously reported results, we have improved the interpolation to physical quark masses using chiral perturbation theory, adjusted for variations in charm quark mass between ensembles, and derived a 'prediction' function for estimating the scale using  $w_0/a$  on new ensembles with unphysical quark masses. Additional results include a comparison of  $t_0/a$  to  $w_0/a$  and a test of agreement between the RHMC and RHMD generation algorithms.

Primary author: BROWN, Nathan (Washington University in St. Louis)Presenter: BROWN, Nathan (Washington University in St. Louis)Session Classification: Hadron spectroscopy and interaction

Track Classification: Hadron Spectroscopy and Interactions