The 37th International Symposium on Lattice Field Theory (Lattice 2019)



Contribution ID: 145 Type: Parallel

Fits of SU(3) N_f=8 data to dilaton-pion effective field theory

Thursday 20 June 2019 16:50 (20 minutes)

We report on fits of the SU(3) N_f=8 LSD spectral data to chiral perturbation theory with a dilatonic meson. These fits confirm that current simulations are in the "large-mass" regime, with approximate hyperscaling as the leading mass dependence. We find that the leading-order effective field theory describes the data well. In particular, the effective field theory allows us to understand the staggered taste splitting, explaining the pattern observed in the LSD data, which looks different from QCD.

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Session Classification: Physics Beyond the Standard Model

Track Classification: Physics Beyond the Standard Model