

Dynamical overlap fermions in the epsilon-regime

Presenter: Hidenori Fukaya (RIKEN)

H.Fukaya, S.Hashimoto, K.Kanaya, T.Kaneko, H.Matsufuru, K.Ogawa, M.Okamoto, T.Onogi, N.Yamada for JLQCD Collaboration

Abstract: We perform a $N_f=2$ dynamical overlap fermion simulation in the epsilon regime. Sea quark mass is reduced to ~ 2 MeV on a $16^3 \times 32$ lattice with $1/a \simeq 1.9$ GeV. Topological charge is fixed at $Q=0$. We measure the eigenvalue distribution of the overlap-Dirac operator as a function of sea quark mass. We also report preliminary results on meson correlators.