Contribution ID: 138 Type: not specified

Dirac eigenvalue spectrum and its relation to U(1)A symmetry breaking in high temperature Nf = 2 + 1 QCD

Tuesday, 4 August 2020 14:40 (20 minutes)

We will present results on the Dirac eigenvalue spectrum as well as its relation to the axial U(1) and SU(2)xSU(2) symmetries at a high temperature in (2+1)-flavor QCD. The simulations are carried out using the highly improved staggered quarks (HISQ) action on N τ = 8, 12 and 16 lattices with the aspect ratio N σ /N τ in a range of [4,9] and 4-5 pion masses ranging from 160 MeV to 55 MeV at a single temperature of ~ 200 MeV.

Primary author: ZHANG (*), Yu (Central China Normal University)

Co-authors: DING, H.-T.; LI, S.-T.; MUKHERJEE, Swagato; TOMIYA, A.; WANG, X.-D.

Presenter: ZHANG (*), Yu (Central China Normal University)

Session Classification: QCD at nonzero Temperature and Density

Track Classification: QCD at nonzero Temperature and Density