

Contribution ID: 403

Type: Oral presentation

The static potential in 2+1+1-flavor QCD

Thursday 29 July 2021 06:15 (15 minutes)

We report on the status of the analysis of the static potential in 2+1+1-flavor QCD. The static potential is obtained by measuring Wilson loops using the HISQ action, yielding the scales r_1/a , r_2/a , and the string tension σ . We put our emphasis on the possible effects due to the dynamic charm quark by comparing the lattice results to continuum results of the static potential with and without a massive flavor at two loops.

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Session Classification: Vacuum Structure, Confinement, and Chiral Symmetry

Track Classification: Vacuum Structure, Confinement, and Chiral Symmetry