Excited QCD 2022



Contribution ID: 62

Type: not specified

Confinement and Coulomb gauge Lattice QCD

Friday 28 October 2022 18:30 (30 minutes)

In Coulomb gauge QCD, there exists an instantaneous chromo-electric interaction between static quarkantiquark pairs. Studying this interaction is an effective way to probe aspects of quark confinement, as the confining behavior of this 'Coulomb potential'is related to the confining behavior of the Wilson potential in non-gauge fixed QCD. A clearer picture of the mechanism of confinement would then allow us to better explain aspects of the meson spectrum. We present our attempts to understand this interaction via SU(2) and SU(3) Coulomb Gauge Lattice QCD simulations on anisotropic lattices.

Presenter: SMITH, Wyatt (Indiana University)