



Contribution ID: 223

Type: Talk

Short- and intermediate-distance HVP contributions to muon $g-2$

Wednesday 31 July 2024 12:15 (20 minutes)

We report on the Fermilab Lattice, HPQCD and MILC collaboration effort to compute the hadronic vacuum polarization correction to the muon $g-2$. In particular, we present new results for the connected light-quark, strange, and charm contributions to the short- and intermediate-window quantities. For the short-distance observables, we compare with results from perturbative QCD. We outline our calculational strategy for obtaining our completely updated determination of the HVP, including isospin-breaking corrections, which are described in separate talks. All the calculations are performed on 2+1+1 highly-improved staggered-quark (HISQ) ensembles with a physical pion mass.

Primary authors: COLLABORATION, Fermilab Lattice HPQCD and MILC; LAHERT, Shaun

Presenter: LAHERT, Shaun

Session Classification: Quark and lepton flavour physics

Track Classification: Quark and Lepton Flavour Physics