

Progress in the HLbL contribution

Wednesday, 25 February 2026 15:00 (30 minutes)

We present a lattice calculation of the Hadronic Light by Light (HLbL) contribution of the strange- and charm-quark connected contributions to the anomalous magnetic moment of the muon. We employ the gauge configurations generated by the Extended Twisted Mass Collaboration (ETMC) with $N_f = 2 + 1 + 1$ flavors of Wilson-clover twisted-mass quarks at four lattice spacings at the physical point.

We perform a careful check of the potential sources of systematic errors and implement an extrapolation to the continuum limit based on the data at lattice spacings $a \simeq 0.049, 0.057, 0.068, 0.080$ fm (ensembles cB, cC, cD).

We also present our preliminary results of the light-quark contributions coming from the fully connected and (2+2) disconnected diagrams for the ensembles cB, cC.

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Session Classification: Session