Contribution ID: **227** Type: **Talk**

Progress on the Hadronic vacuum polarization contribution to muon g-2 from lattice QCD

Monday 29 July 2024 15:15 (20 minutes)

We give an update of our calculation of the light-quark, connected hadronic vacuum polarization contribution to the muon anomalous magnetic moment. The update includes preliminary results on a $2+1+1$ highly-improved staggered quark (HISQ) ensemble from the MILC collaboration with physical pion mass, 0.042 fm lattice spacing, and size $144^3 \times 288$ sites. We discuss code and algorithm improvements for these calculations to compute the vector-vector correlation function more efficiently.

Authors: AUBIN, Christopher (Fordham University); JIN, Luchang (University of Connecticut); GOLTERMAN, Maarten (San Francisco State University); PERIS, Santiago (univ. autonoma de barcelona); BLUM, Thomas (UConn); MONINGI, Vaishakhi (University of Connecticut)

Presenter: MONINGI, Vaishakhi (University of Connecticut)

Session Classification: Quark and lepton flavour physics

Track Classification: Quark and Lepton Flavour Physics