XVIth Quark Confinement and the Hadron Spectrum



Contribution ID: 66

Type: Oral

Dispersive determinations of lattice HVP window quantities for muon g-2

Monday 19 August 2024 16:40 (20 minutes)

We detail dispersive evaluations of various window quantities relevant to the determination of the HVP contribution to the anomalous magnetic moment of the muon in the Standard Model, and compare these to lattice evaluations of the same quantities. Of particular interest are the light-quark connected window quantities, where dispersive results obtained using data prior to the new CMD-3 2-pion cross-section results show sizeable discrepancies with lattice results. We also show that replacing the old 2-pion data with the CMD-3 in the region where the latter is measured removes all these discrepancies.

Primary authors: KESHAVARZI, Alexander (Manchester University); BOITO, Diogo (San Paulo U, San Carlos); BENTON, Genessa (San Francisco State University); MALTMAN, Kim; GOLTERMAN, Maarten (San Francisco State University); PERIS, Santiago (IFAE, Barcelona)

Presenter: MALTMAN, Kim

Session Classification: QCD and New Physics

Track Classification: E: QCD and New Physics