

Muon $g-2$ and $\Delta\alpha$ connection

Tuesday, 11 May 2021 17:00 (1h 30m)

The Muon $g-2$ experiment at Fermilab has recently confirmed Brookhaven's earlier measurement of the muon anomalous magnetic moment a_μ . This new result increases the discrepancy Δa_μ with the Standard Model (SM) prediction and strengthens its "new physics" interpretation as well as the quest for its underlying origin. In this talk I will review the SM prediction of the muon $g-2$, focusing on some of the latest developments, and discuss the connection of the discrepancy Δa_μ to precision electroweak predictions via their common dependence on hadronic vacuum polarization effects.

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