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The pseudoscalar poles contributions to the muon g-2

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The recent result from the Fermilab experiment on the anomalous magnetic moment of the muon (g-2) has revived the interest on this observable, that exhibits an interesting —and persistent— 4σ discrepancy with respect to its theoretical value.

Future runs at Fermilab will help deciphering the nature of such discrepancy, but that will require a commensurate improvement on the theory side, completely dominated by hadronic uncertainties.

In this talk, we revise the main piece of the hadronic light-by-light contribution to the anomalous magnetic moment of the muon: the pseudoscalar poles. To that purpose, we use the framework of Padé and Canterbury approximants, that allows to analyze and to describe the relevant transition form factors entering the calculation in a model-independent and data-driven fashion.

What is your topic?

Anomalous Magnetic Moment of the muon

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