

## XVth Quark Confinement and the Hadron Spectrum



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### Hadronic vacuum polarization and some atomic binding effects relevant for the MUonE experiment

*Friday 23 August 2024 11:30 (30 minutes)*

The MuonE experiment proposes to extract the hadronic contribution to photon propagator from a high precision measurement of the differential scattering of muons off atomic electrons. This is important for understanding the expected value of the anomalous magnetic moment of the muon in the Standard Model. In this talk I discuss atomic binding corrections that influence this extraction. The methods used can also be applied to neutrino scattering off atomic electrons. Some aspects of perturbative final state interactions are also discussed.

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