

Hadronic vacuum polarization from lattice QCD(+QED) with C^* boundary conditions

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Achieving subpercent precision in calculating the hadronic vacuum polarization contribution to the muon $g - 2$ is essential to correctly interpret new experimental results. At this level of precision, electromagnetic effects from charged quarks cannot be neglected. Lattice QCD+QED simulations present unique challenges, primarily due to the long-range nature of electromagnetic interactions. Our collaboration tackles these challenges by implementing lattice QCD+QED simulations with C^* boundary conditions. In this talk, I will outline our specific approach, highlight the benefits it offers, and present our latest progress.

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