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The role of convergence methods as fitting functions in the context of the MuonE experiment

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In the context of the anomalous magnetic moment of the muon, the hadronic contribution plays a crucial role, especially concerning the error budget estimation. Currently, lattice QCD simulations confront the dispersive calculations based on e+e- hadronic cross sections. The new MUonE experimental proposal pretends to shed light on that situation. Still, a powerful method to extract the desired hadronic contribution from such a new experiment should be devised. In this talk, we will show how acceleration-of-convergence methods profiting from the analyticity of the correlator driving the hadronic contribution are key to reaching the required precision.

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