Contribution ID: **237**   Type: **Contributed**

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

Thursday, 8 June 2023 14:20 (20 minutes)

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.

Primary author: MASJUAN, Pere (IFAE/UAB)

Co-authors: Mr ROJAS, Camilo (IFAE/UAB); Ms LONDON, Cristiane (IFAE); Prof. BOITO, Diogo (IFSC Sau Paulo)

Presenter: Mr ROJAS, Camilo (IFAE/UAB)

Session Classification: Hadrons and physics beyond the standard model

Track Classification: Hadrons and physics beyond the standard model