



Contribution ID: 95

Type: **Talk**

## Status of the MUonE experiment

*Monday, 30 August 2021 11:30 (30 minutes)*

The MUonE experiment aims at an independent and competitive determination of the leading hadronic contribution to the muon anomalous magnetic moment  $a_\mu = (g_\mu - 2)/2$ , based on an alternative method, complementary to the existing ones. It could have a crucial role to clarify the comparison of the  $a_\mu$  measurement with the Standard Model, given the recent Fermilab result, and the tension between the accepted theory prediction and a new Lattice QCD calculation.

MUonE proposes to measure the hadronic component of the running electromagnetic coupling by the  $\mu e$  elastic scattering obtained by the 160 GeV muon beam at CERN on fixed target. The project status will be presented, in view of the test run on a reduced detector expected in 2021-22.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

MUonE (CERN) (project web page: <https://web.infn.it/MUonE/>)

### Is the speaker for that presentation defined?

Yes

### Details

Dr. Giovanni Abbiendi, INFN Sezione di Bologna, Italy, <https://www.bo.infn.it/>

### Internet talk

Maybe

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**Session Classification:** Mini Workshop on Instruments and Methods in HEP