



Contribution ID: 376

Type: **not specified**

## Implications of the Muon Anomalous Magnetic Moment for 3-3-1 Models

*Tuesday 24 August 2021 21:40 (20 minutes)*

We explore the implications of  $g-2$  new result to five models based on the  $SU(3)_C \times SU(3)_L \times U(1)_N$  gauge symmetry and put our conclusions into perspective with LHC bounds. We show that previous conclusions found in the context of such models change if there are more than one heavy particle running in the loop. Moreover, having in mind the projected precision aimed by the  $g-2$  experiment at FERMILAB, we place lower mass bounds on the particles that contribute to muon anomalous magnetic moment assuming the anomaly is resolved otherwise. Lastly, we discuss how these models could accommodate such anomaly in agreement with existing bounds.

**Author:** SÁNCHEZ VILLAMIZAR, Yoxara (IIP & DFTE - Federal University of Rio Grande do Norte (UFRN))

**Presenter:** SÁNCHEZ VILLAMIZAR, Yoxara (IIP & DFTE - Federal University of Rio Grande do Norte (UFRN))

**Session Classification:** Flavor Physics and CP Violation

**Track Classification:** Flavor Physics and CP Violation