

Measurement of the tau $g - 2$ factor in the ultraperipheral PbPb collisions recorded by the CMS experiment

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Measurements of the anomalous magnetic moment of leptons are good handles for precision tests of the Standard Model and hints of physics beyond the Standard Model. These measurements for electrons and muons are among the most precisely measured quantities in physics. However, due to the short lifetime of the tau lepton, its anomalous magnetic moment is not as precisely known and needs to be measured innovatively and collaboratively. The CMS experiment follows a comprehensive approach to measure this quantity in complementary phase spaces of ultraperipheral hadron collisions. We will report the latest measurements of the anomalous magnetic moment of the tau lepton using ultraperipheral PbPb collisions recorded by the CMS experiment.

Category

Experiment

Collaboration

CMS

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