

Seminar Odjela za fiziku

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Mjesto: O-152, Odjel za fiziku, Sveučilišni kampus, Radmile Matejčić 2

Jezik: engleski

Searches for physics beyond the standard model: the Muon g-2 Experiment at Fermilab.

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Abstact

The value of the muon anomalous magnetic moment (muon g-2) predicted by the Standard Model differs by about 3.5 sigma from the most recent experimental measurement performed at the Brookhaven National Laboratory in 2004. The Fermilab Muon g-2 experiment aims to measure the muon anomalous magnetic moment with a precision a factor 4 better than the Brookhaven measurement. If the tension is confirmed, it would be an indication of new physics beyond the Standard Model. In this seminar, after a brief introduction to the muon anomalous magnetic moment and the history of the measurement, I will discuss the status and preliminary analysis of the new Fermilab Muon g-2 data.