

New results from the Muon g-2 experiment at Fermilab

Wednesday, 30 June 2021 14:30 (1 hour)

At the beginning of 2000's the E821 experiment at Brookhaven (USA) has measured the anomalous magnetic moment of the muon (known also as muon g-2) with a precision of 0.54 parts per million, finding a discrepancy of about three standard deviations with the theoretical prediction of the Standard Model. This longstanding discrepancy is one of the most intriguing hints of new physics in particle physics. In order to understand this discrepancy a new Muon g-2 experiment has been approved at Fermilab (USA) and started taking data in 2018. We will report the first results of the new Muon g-2 Experiment at Fermilab which measured the muon g-2 with a precision slightly better than the BNL one

Presenter: Prof. VENANZONI, Graziano