

## **COLLOQUIA 2020/2021**

## Giovedì 13 Maggio 2021, ore 16 Online su Zoom

## New results from the muon g-2 experiment at Fermilab

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**Abstract:** At the beginning of 2000's the E821 experiment at Brookhaven (USA) has measured the anomalous magnetic moment of the muon (also known as the 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.

\*The link Zoom will be sent by email to all people belonging to the Physics Department and INFN Pavia. Other interested people should register before 11/05/2021 at this link: https://forms.gle/Bv3KR5tZLqMuyJi49

