**Istituto Nazionale di Fisica Nucleare Laboratori Nazionali di Frascati**

Avviso di Seminario Generale

# Dr. Giuseppe Gagliardi

(Roma Tre Univ.)

**Status of Theory Calculations of the Muon Anomalous Magnetic Moment**

The FNAL collaboration has measured the value of the muon anomalous magnetic moment, $a\_{\mu} = g\_{\mu} - 2$, achieving an unprecedented precision of 0.2 ppm.

From the theoretical perspective, it is crucial to match this experimental precision. The most challenging part of the theoretical calculation comes from the leading hadronic vacuum polarization (HVP) contribution $a\_{\mu}^{\rmHVP-LO} $, which must be determined with subpercent precision.

In this seminar, I will review the latest lattice QCD results for $a\_{\mu}^{\rm HVP-LO}$, as well as for the subleading hadronic light-by-lightcontribution, and discuss the phenomenological impact of these results

## Mercoledi’ 29/1/2025 ore 14:30 Aula Salvini

https://agenda.infn.it/event/44908/

L'invito è esteso a tutto il personale interessato, che è caldamente invitato a partecipare.