## Phenomenology 2025 Symposium



Contribution ID: 47

Type: not specified

## Precision QED: how to handle electrons with boundaries

Tuesday 20 May 2025 15:00 (15 minutes)

The anomalous magnetic dipole moment (g-2) of the electron is one of the most precisely measured quantities in the world. To push precision beyond the current record, we can no longer assume the electron is in free space. We calculate g-2 for an electron in a cylindrical cavity and demonstrate that the boundary correction can be measured in a near-future experiment.

## Mini Symposia (Invited Talks Only)

## Plenary (Invited talks only)

Authors: BERLIN, Asher (Fermilab); Dr GABRIELSE, Gerald; DAY, Hannah; HARNIK, Roni; PAVASKAR, Shashin; KAHN, Yonatan

**Presenter:** DAY, Hannah

Session Classification: New Developments in Theory

Track Classification: New Developments in Theory