## IRN Terascale @ IPHC Strasbourg



ID de Contribution: 9

Type: Non spécifié

## Probing a class of scotogenic models via Z- and Higgs boson decays

mardi 20 mai 2025 10:00 (30 minutes)

We address the phenomenological impact of a well-motivated class of scotogenic models regarding electroweak precision observables.

In particular, we carry out a full computation of the next-to-leading order corrections to leptonic Higgs and Z-boson decays. We argue how

the current bounds (and future prospects) for the latter observables, together with constraints arising from lepton flavour violating transitions

(muon and tau decays, as well as Z and Higgs decays) lead to additional constraints on the parameter space. We further explore how the evolution in the tension between theory and observation regarding the anomalous magnetic moment of the muon

can affect previously drawn conclusions on interesting regimes in parameter space.

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Classification de Session: Beyond the Standard Model

Classification de thématique: BSM