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# Higgs EFT modifications of tau g−2 using LHC photon collisions

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The tau anomalous magnetic moment g−2 strikingly evades experimental measurement, but its larger mass implies greater sensitivity to new physics than the muon counterpart, which reports a longstanding 3–4 sigma tension. Interestingly, the only two dimension-6 SMEFT operators that modify tau g−2 at tree-level involve Higgs–gauge–fermion couplings. We propose a new strategy using the LHC as a photon collider, low multiplicity triggers, and recent advances in soft lepton reconstruction to open new sensitivity beyond LEP to these SMEFT operators and BSM contributions to tau g−2.

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