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Towards a dispersive calculation of isospin-breaking corrections for τ data

The hadronic τ decay, $\tau \to \pi\pi^0\nu_\tau$, provides an independent way to compute the HVP contribution to the muon $g-2$ Standard Model (SM) prediction, provided one is able to reliably evaluate the relevant isospin breaking (IB) corrections. I will present a dispersive approach to the evaluation of the IB corrections relating $\tau \to \pi\pi^0\nu_\tau$ to $e^+e^- \to \pi^+\pi^-$, with the goal of providing an alternative way to calculate the 2π HVP contribution to the muon $g-2$. Results for the long-range corrections usually denoted by $G_{EM}(t)$ will be presented, as well as a roadmap towards a full dispersive evaluation of the required IB correction.

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