

# Status report on the hadronic light-by-light contribution to the muon $g-2$ using twisted-mass fermions

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with

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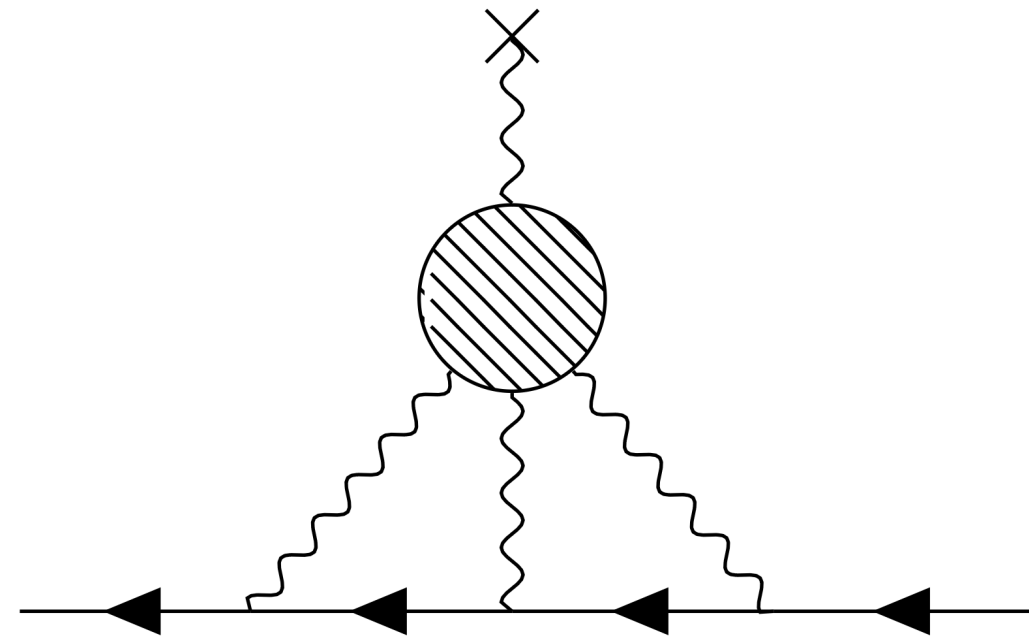
on behalf of the ETM Collaboration

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- Presentation of preliminary results on the HLbL contribution to the muon  $g-2$  from lattice QCD.
- Framework: **Twisted-mass fermions** on **2+1+1 gauge ensembles** at the **physical point**, generated by the Extended Twisted Mass Collaboration (ETMC).

- Mainz approach:

$$a_{\mu}^{\text{HLbL}} = \frac{me^6}{3} \int_{x,y} \bar{\mathcal{L}}_{[\rho,\sigma];\mu\nu\lambda}(x,y) i\hat{\Pi}_{\rho;\mu\nu\lambda\sigma}(x,y)$$

- Focus on the connected and 2+2 contributions (as defined by Mainz).
- Presented preliminary results: Extrapolated results to the continuum for charm, strange connected; One-lattice-spacing results for light connected and light-light 2+2.