

Muonic Force Behind Flavor Anomalies

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An economical theoretical framework for combined explanations of the flavor physics anomalies involving muons, $(g-2)_\mu$, $RK^{(*)}$ and $b \rightarrow s \mu \mu$ supplements the Standard Model (SM) with a lepton-flavored $U(1)_X$ gauge group where the gauge boson has mass of $O(0.1)$ GeV and a TeV-scale leptoquark. We explore the theory space of the chiral, anomaly-free $U(1)_X$ gauge extensions and carry out a comprehensive phenomenological study of the muonic force in representative benchmark models

What is your topic?

Lepton universality and flavour violation

Author: ZUPAN, Jure (University of Cincinnati)

Presenter: ZUPAN, Jure (University of Cincinnati)

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