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## Shedding the light on $B_{d,s} \rightarrow K^{(*)}K^{(*)}$ non-leptonic puzzle

The current data on several observables in  $b \to s\mu^+\mu^-$  transitions reveal certain discrepancies with Standard Model (SM) predictions. Considering the possibility that these deviations could stem from new physics, we explore the scenario where a non-universal Z' boson may be responsible. Additionally, we hypothesize that its couplings with quarks could influence an observable known as the non-leptonic puzzle  $L_{K^*\bar{K}^*}$ , related to rare  $B_{s(d)} \to K^{(*)}K^{(*)}$  processes. By incorporating constraints from various  $b \to s(d)\mu^+\mu^-$  measurements, we analyze the potential impact of the Z' model on this observable.

## Field of contribution

Phenomenology

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