

## Charm contributions in $B$ to $K^* l+l^-$

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The rare semileptonic  $B_d \rightarrow K^* l+l^-$  decay has been extensively studied within the Standard Model and beyond. Significant efforts from Lattice QCD groups have reduced theoretical errors in the form-factors to tractable limits in the high  $q^2$  regime while arguments from LCSR can be used for the same in the low  $q^2$  regime. However, hadronic contributions coming primarily from charm loops still plague the predictions of many observables in this channel. While the intricacies of QCD prevent exact estimation of these hadronic contributions, experimental analysis will be reaching a point where these can be determined from data.

We present in this work a Bayesian analysis of the decay in the full range of  $q^2$ , in which we extract these charm loop hadronic contributions from available data. We also make well-motivated arguments about the size of the hadronic contributions and ultimately show the compatibility of the currently available experimental data with the Standard Model predictions.

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