

Towards global analysis of $b \rightarrow s l^+ l^-$ decays

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The final data sets of BaBar, Belle and CDF as well as the current run of LHCb are about to significantly improve the experimental knowledge on rare B -decays governed by $b \rightarrow s l^+ l^-$. In view of this, we will present new tests of the electroweak short-distance couplings in the Standard Model and beyond, including a general set of non-standard interactions. Especially, the angular analysis of $B \rightarrow K^* (-> K \pi) l^+ l^-$ provides a large number of new observables which allow to efficiently disentangle short-distance (new) physics from long-distance QCD effects. The potential to test the Standard Model and specific non-standard interactions will be discussed, focusing on the high-dilepton invariant mass region, which is complementary to the low-dilepton mass region. Results of a model-independent analysis are presented, using current constraints from $B \rightarrow K l^+ l^-$ and $B \rightarrow K^* l^+ l^-$ for both regions in combination with other rare B -decays.

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