

## Revisiting the $(K \rightarrow e\gamma)/(K \rightarrow \mu\gamma)$ ratio in supersymmetric unified models

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### Abstract content

It has been pointed out that supersymmetric extensions of the Standard Model can induce significant changes to the theoretical prediction of the ratio  $\Gamma(K \rightarrow e\nu)/\Gamma(K \rightarrow \mu\nu) = R_K$ , through lepton flavor violating couplings. We shall discuss these new contributions to  $R_K$  arising in the context of different constrained supersymmetric models which succeed in accounting for neutrino data, further considering the possibility of accommodating a near future observation of a  $\mu \rightarrow e\gamma$  transition. The prospects for  $R_K$  in the framework of unconstrained supersymmetric models will also be accessed, taking into account limits on  $BR(B_s \rightarrow \mu\mu)$  and, more importantly,  $BR(\tau \rightarrow e\gamma)$  and  $BR(B_u \rightarrow \tau\nu)$ .

### Summary

**Presenter(s)** : FONSECA, Renato

**Session Classification** : Parallel Session on Flavor Physics