

The ϵ' anomaly: consequences for supersymmetry and $K \rightarrow \pi \nu \bar{\nu}$

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The measure ϵ' of direct CP violation in $K \rightarrow \pi\pi$ decays disagrees with the Standard-Model prediction by 2.8 standard deviations. It is possible to explain this discrepancy with supersymmetric contributions involving squarks and gluinos in the multi-TeV range. I discuss the footprint of this scenario on the rare decays $K^+ \rightarrow \pi^+ \nu \bar{\nu}$ and $K_L \rightarrow \pi^0 \nu \bar{\nu}$.

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