

# Seesaw Models and Charged Lepton Flavor Violation in Meson Decays: A Comparative Study

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The observation of neutrino oscillations implies the existence of flavour violation in the charged lepton sector. The branching ratios of various charged lepton flavour-violating (CLFV) decay modes are influenced by the underlying neutrino mass model. This study investigates the correlations between radiative CLFV decays and meson CLFV decays within the framework of the three simple seesaw mechanisms for neutrino mass generation. We observe that meson CLFV decay branching ratios are negligibly small in the type-II seesaw mechanism. If the branching ratios of meson CLFV decays exceed those of radiative CLFV decays, it serves as compelling evidence that the neutrino mass generation mechanism is more intricate than the simple seesaw framework.

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