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Study of the kaon electromagnetic form factors in $e^+e^-$ annihilation and $\tau$ decays

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The recent precise measurements of the $e^+e^- \rightarrow K_S K_L$ and $e^+e^- \rightarrow K^+K^-$ cross sections and the hadronic spectral function of the $\tau^- \rightarrow K^- K_S \nu_\tau$ decay are used to extract the isoscalar and isovector electromagnetic kaon form factors and their relative phase in a model independent way. The experimental results are compared with a fit based on the vector-meson-dominance model.