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KTeV Results on CP violation in $K_L \to \pi^+\pi^-e^+e^-$ ALEXANDER GOLOSSANOV¹, University of Virginia² — The decay $K_L \to \pi^+\pi^-e^+e^-$ offers an excellent opportunity to measure indirect CP violation in the kaon system. This process exhibits a large CP violating asymmetry through a T-odd angular variable, and allows access to the charge structure of neutral kaon and possible CP-violating E1 amplitude through precision measurement of the decay form factors. The KTeV experiment at Fermilab has identified over 5000 of these rare decays. We report the final measurements of the asymmetry, form factors, branching ratio and the K^0 charge radius based on this data sample.

¹for KTeV Collaboration ²Fermilab experiments E799-II/E-832

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