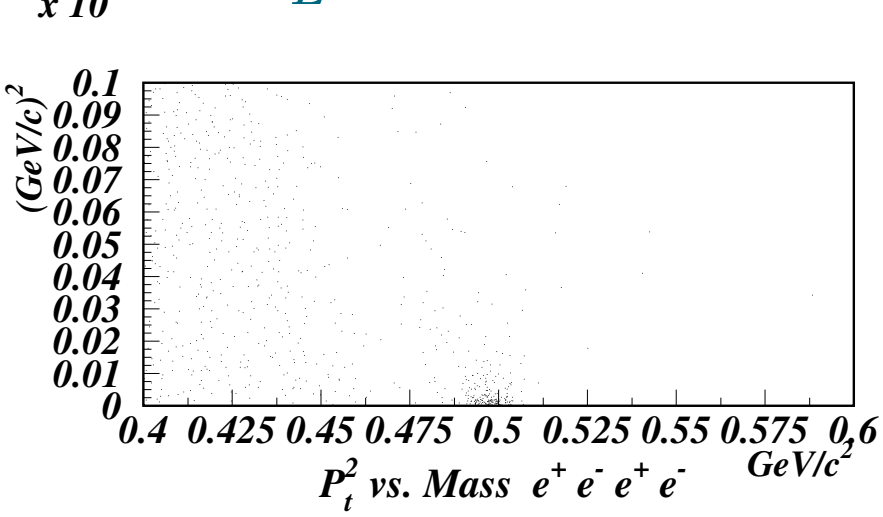
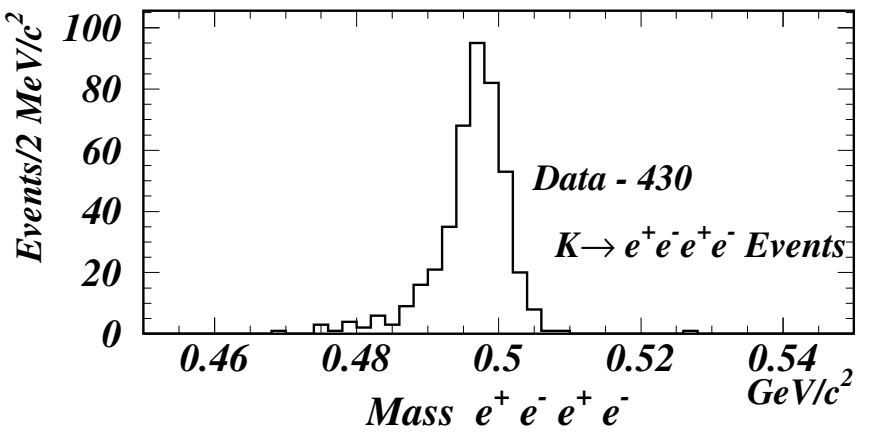
$K_L \to e^+e^-e^+e^-$





KTeV PRELIMINARY Result:
BR($K_L \to e^+e^-e^+e^-$) = $(4.14 \pm 0.27\ (\text{stat}) \pm 0.31\ (\text{sys})) \times 10^{-8}$

Theory:

3.68×10^{-8} (Pure QED)
Miyazaki, Takasugi, Phys Rev. **D8** 2051 (1973)

3.73×10^{-8} (VMD)
Quigg, Jackson, UCRL-18487 (1968)

3.8×10^{-8} (χPT With Form Factor)
3.7×10^{-8} (χPT No Form Factor)
Zhang, Goity, Phys. Rev. **D57**, 7031 (1998)

Previous Measurement : 27 Events.