Search for Resonant $t\bar{t}$ Pair Production in the Lepton+Jets Channel at CDF

JUNJI NAGANOMA, Waseda University — We present a search for the $t\bar{t}$ resonance which interferes with the Standard Model process. The data are collected in CDF Run2 experiment from $p\bar{p}$ collisions at Tevatron with the integrated luminosity of 1.2 fb$^{-1}$. We select lepton+jets events requiring at least one jet to be identified as a b-jet. We then reconstruct the $t\bar{t}$ invariant mass by the dynamical likelihood method (DLM) to increase the sensitivity for discovery. We search for the deviations from the Standard Model prediction in the $t\bar{t}$ invariant mass spectrum.

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