

# Top quark mass measurement using $mT2$ at CDF

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For the Tevatron and future LHC searches of new physics at the TeV scale, the mass determination of particles pair produced with final states characterized by the presence of missing transverse momenta is of great importance. Within the various methods for mass determination,  $mT2$  is one of the best observables. This variable has been extensively studied relying until now on Monte Carlo Simulations. Using for the first time the  $mT2$  observable in data, we measured the top quark mass in the dilepton channel in a sample of  $3.4 \text{ fb}^{-1}$ .

**Presenter:**

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**Track Classification:** Top Quark Physics