

Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Top Quark Mass Measurement in the Dilepton Channel using the $t\bar{t}$ P_z at CDF TUULA MAKI, University of Helsinki — We present a top mass measurement using data collected by the CDF experiment at Fermilab. The measurement uses $t\bar{t}$ event candidates having two high transverse momentum leptons, at least two jets and missing transverse energy from escaping neutrinos. Reconstruction of the top quark mass from dilepton events involves an underconstrained system. In this analysis, it is resolved by introducing an additional equation for the longitudinal momentum of the $t\bar{t}$ system. The top quark mass is reconstructed for each event, and the final result is achieved by comparing the resulting distribution from data to Monte Carlo templates.

Kirsten Tollefson
Michigan State University

Date submitted: 12 Jan 2007

Electronic form version 1.4