Abstract Submitted for the APR15 Meeting of The American Physical Society

Measurements of Top Quark Mass at the Tevatron in the dilepton final state using neutrino weighting HUANZHAO LIU¹, Southern Methodist University, DZERO COLLABORATION — We present the measurement of the mass of the top quark (m_t) in inclusive dilepton final states of $t\bar{t}$ events using the full Run II data set corresponding to an integrated luminosity of 9.7 fb^{?1}. Employing the expected neutrino rapidity distribution the neutrino weighting technique is used to extract a measurement of m_t . Ensemble tests of pseudo-experiments are performed to calibrate and correct the extracted m_t , and to estimate its statistical uncertainty. The measured top quark mass is reported and compared to other recent mass measurements.

¹Presenting on behalf of the D0 Collaboration

Rick Van Kooten Indiana University

Date submitted: 09 Jan 2015

Electronic form version 1.4