Abstract Submitted for the APR08 Meeting of The American Physical Society

Measurement of the Top Quark Mass at D0 Using the Ideogram Method in the Lepton+Jets Channel AMNON HAREL, University of Rochester, D0 COLLABORATION — We report on the measurement of the top quark mass based on a 1 fb $^{-1}$ sample of ttbar events in the lepton+jets final state. For each event, a probability based on the kinematic reconstruction of the event is calculated as a function of the top mass and the overall jet energy scale. The top mass and jet energy scale are extracted by maximizing a likelihood constructed as the product of the single event probabilities. The overall jet energy scale is constrained by the two jets from the hadronic W boson decay.

Graham Wilson University of Kansas

Date submitted: 09 Apr 2008

Electronic form version 1.4