Abstract Submitted for the APR07 Meeting of The American Physical Society

Measurement of the top quark mass at D0 using the ideogram method in the lepton+jets channel PIETER HOUBEN, NIKHEF, D0 COLLABORATION — We report on the measurement of the top quark mass using $t\bar{t}$ candidates 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 constraint by the two jets from the hadronic W boson decay.

Ulrich Heintz Boston University

Date submitted: 10 Jan 2007 Electronic form version 1.4