

Abstract Submitted  
for the APR05 Meeting of  
The American Physical Society

**Measurement of the Top  
Quark Mass in the Electron+Muon+Jets Decay Channel at DØ** JEFF  
TEMPLE, University of Arizona, DZERO COLLABORATION — The top quark  
mass is one of the fundamental parameters of the Standard Model. We present a  
preliminary measurement of the top quark mass in the electron+muon+jets decay  
channel of  $t\bar{t}$  events, using data collected by the DØ experiment during Run II of the  
Fermilab Tevatron collider. The method used for the top quark mass determination,  
called the “neutrino weighting scheme”, makes use of the sensitivity of the neutrino  
rapidity distribution to the top quark mass. Systematic errors associated with this  
measurement are also discussed.

Sharon Hagopian  
Florida State University

Date submitted: 14 Jan 2005

Electronic form version 1.4