

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**W**  $\rightarrow$   $\ell\nu + \geq n$  jets at CDF DALE STENTZ, Northwestern University, CDF COLLABORATION — We present results on the production of W bosons associated with hadronic jets at the Collider Detector at Fermilab (CDF II). W +  $\geq n$  jets provides a way to study theoretical perturbative QCD predictions at high momentum transfer and is an important background for top and higgs production. We study both the electron and muon decay channels using an integrated luminosity of  $2.8 \text{ fb}^{-1}$  with up to four inclusive number of jets with  $p_T^{jet} > 20 \text{ GeV}/c^2$  and  $|\eta^{jet}| < 2.0$ . Differential cross-sections of various jet kinematics are measured and compared to theoretical predictions. These include the inclusive jet multiplicity cross-section ( $d\sigma/dn$ ), the  $n^{th}$  leading jet transverse momentum spectrum ( $d\sigma/dp_T$ ), and the dijet separation and mass differential cross-sections ( $d\sigma/dR_{jj}$  and  $d\sigma/dm_{jj}$ , respectively).

Dale Stentz  
Northwestern University

Date submitted: 23 Oct 2009

Electronic form version 1.4