Abstract Submitted for the APR09 Meeting of The American Physical Society

Measurement of the ZZ/WZ/WW Diboson cross section in MET+jets final states at CDF GENE FLANAGAN, Purdue University, VADIM RUSU, SASHA PRONKO, Fermilab — We present the first measurement of the Diboson production cross section in the MET+2jet channel in 2.5 fb⁻¹ of integrated luminosity of the Fermilab Tevatron's proton-antiproton collisions taken by the CDF II detector. We select events with two jets with $E_T > 25$ GeV and significant missing transverse energy, MET. The measurement in this signature is very challenging due to presence of large QCD multi-jet background with fake MET. We use advance techniques to suppress this background by removing events where MET has low significance compared to signal. The MET significance is calculated on event by event basis and takes into account jet energy resolution.

> Kenichi Hatakeyama Rockefeller University

Date submitted: 09 Jan 2009

Electronic form version 1.4