

Abstract Submitted  
for the APR05 Meeting of  
The American Physical Society

**Search for  $ZZ/ZW \rightarrow l^+l^- + q\bar{q}(\prime)$  at the Tevatron** JONATHAN EFRON, RICHARD HUGHES, BEN KILMINSTER, BRIAN WINER, Ohio State University, CDF COLLABORATION — We present a search for diboson production at CDF with the final state of two leptons and two hadronic jets. This selection is sensitive to both  $ZZ \rightarrow l^+l^- + q\bar{q}$  and  $ZW \rightarrow l^+l^- + q\bar{q}'$ . The main background is  $Z$  bosons produced in association with extra jets. The signal can be discriminated from the background by its dijet mass resonance. While the sensitivity for this final state is small, it is an important step in searching for Higgs boson production in association with a  $Z$  boson, which has a similar topology but a much smaller cross-section.

Chris Hays  
Duke University

Date submitted: 26 Jan 2005

Electronic form version 1.4