Abstract Submitted for the APR07 Meeting of The American Physical Society

Search for $H \to WW^*$ at CDF DEAN HIDAS, Duke, TOBY DAVIES, Glasgow, DOUG BENJAMIN, Duke, PETER BUSSEY, Glasgow, MARK KRUSE, Duke, AIDAN ROBSON, RICHARD ST. DENIS, Glasgow, A.S. THOMPSON, CDF COLLABORATION — We present a search for single Higgs production with decay to two W bosons using about 1 fb⁻¹ of CDF Run II data. For Higgs masses greater than about 140 GeV/ c^2 the branching ratio to W pairs starts to dominate over that to $b\bar{b}$. We require that both W bosons decay leptonically, and use kinematic variables that discrimate between $H \to WW^*$ and the main background processes in the Neural Network to set cross-section limits on $\sigma(gg \to H) \times BR(H \to WW^*$ as function of Higgs masses between 110 and 200 GeV/ c^2 .

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