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Search for the SM Higgs in semi-leptonic WW^* decays in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV SHANNON ZELITCH, University of Virginia, DZERO COLLABORATION — We present a search for the Standard Model Higgs boson produced via the $H \rightarrow WW^{(*)} \rightarrow l + \nu + j + j$ process at a center-of-mass energy of $\sqrt{s} = 1.96$ TeV using up to 5 fb^{-1} of data collected with the D0 detector at the Fermilab Tevatron collider. We search in events with one lepton (electron or muon), two jets and missing transverse energy. A Higgs particle with a mass greater than 140 GeV primarily decays into a pair of W bosons. While the di-lepton channels provide a cleaner signature, the semi-leptonic decay mode has a significantly larger cross section times branching ratio. Procedures used to identify signal-like events and to overcome the large W +jets background will be discussed.

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