A Study of $H \rightarrow WW^* \rightarrow \ell \nu jj$ at CMS

HEEJONG KIM, N. AKCHURIN, Texas Tech University, J. DAMGOV, INRNE-BAS/FNAL, S. KUNORI, U. Maryland, H. PI, University of Florida, E. YAZGAN, Middle East Technical University/FNAL, CMS COLLABORATION — One of the most challenging channels for observing Higgs boson production at the Large Hadron Collider (LHC) is a Higgs which is produced via the Vector Boson Fusion process and which then decays $H \rightarrow WW^* \rightarrow \ell \nu jj$ ($\ell$ is an electron or muon, $j$ is a jet). We present results of a study of the sensitivity of the CMS experiment for this process, assuming Higgs mass at 120 $GeV/c^2$. 

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