

Abstract Submitted
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Prospects of Off-Shell Production for Higgs Boson Property Measurements LUCAS KANG, Johns Hopkins University — We investigate the two dominant off-shell production mechanisms of the Higgs boson in gluon fusion and weak vector boson fusion with a decay to two Z bosons. Several Monte Carlo techniques are compared and discussed. Effects of Effective Field Theory (EFT) operators on kinematic distributions are investigated. Prospects for the measurement of Higgs boson properties with the LHC and HL-LHC are presented.

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