

Abstract Submitted  
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**Improving the Trigger Efficiency for the WH-lvbb analysis at the CDF experiment** HAO LIU<sup>1</sup>, University of Virginia, CDF COLLABORATION —  
At CDF, we search for the associated production of a Higgs boson and a W boson, where the Higgs boson decays into a b + anti-b quark pair and the W boson decays into a lepton and the corresponding neutrino. Events are selected with a signature of a lepton, large missing transvers energy, and two or three jets. At CDF, events are selected by a variety of triggers, and those triggers are divided into several streams based on the types of requirements of the trigger. Traditionally, in the WH analysis we only use some of triggers, because the trigger efficiency can be calculated easily under those circumstances. In this presentation, we will describe two new triggers to select leptons and will demonstrate a new method to calculate the trigger efficiency. We will use a neural network to calculate the efficiency for the event to be triggered by an entire trigger stream, disregarding each individual trigger. In this way, we can maximize the acceptance of events selected.

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