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Measurement of the ZZ/WZ Diboson cross section in leptons+jets final states at CDF WESLEY KETCHUM, ZAID ALAWI, UChicago, YOUNG-KEE KIM, VADIM RUSU, Fermilab — We present the first experimental measurement on the cross section of ZZ/WZ Diboson production in the charged leptons+jets channel with 3.1 fb^{-1} of integrated luminosity of the Fermilab Tevatron's proton-antiproton collisions taken by the CDF II detector. We select events by identifying two charged leptons whose reconstructed invariant mass lies within 60 GeV and 120 GeV, and also identifying at least two jets. We use an artificial neural network trained on variables relating to the jets, including kinematic variables and a new variable that discriminates between jets originating from quarks and gluons, to help distinguish between the desired signal and the dominant background, Z + jets.

Vadim Rusu
Fermilab

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