Measurement of s-channel single-top-quark production in MET+jets at CDF

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We report a measurement of the single-top-quark production cross section with the full dataset collected by the Collider Detector at Fermilab in $p\bar{p}$ collisions at a center-of-mass energy of 1.96. The events are selected requiring large missing transverse energy, two or more high Pt jets and no leptons in the final state. Multivariate techniques are implemented to suppress the contribution from QCD multijet production and discriminate single-top signal from the remaining background. The measurement of s-channel production is particularly important at the Tevatron since the low cross section at the LHC makes this still unobserved channel very hard to see. Results from an optimized s-channel analysis, performed for the first time in the MET+jets final state, are shown.

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