

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

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We report a measurement of the single-top-quark production cross section in the lepton+jets channel using 9.45/fb of $p\bar{p}$ collision data collected by the Collider Detector at Fermilab at 1.96 TeV center-of-mass energy. Candidate events are classified as signal-like by a neural network discriminant. Measurements of s-channel production are particularly interesting at the Tevatron since this production channel has yet to be definitively observed and it is very difficult to study at the Large Hadron Collider. We show, for the first time publicly, results of an analysis optimized to study s-channel single-top-quark production using the full CDF dataset.

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