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Search for Electroweak Single Top Quark Production at CDF using a Matrix Element Method PETER DONG, Unversity of California - Los Angeles — We present new results from searches for single-top-quark production using 1 fb⁻¹ of data accumulated with the CDF detector. We select events with one charged lepton, large missing transverse energy, and two jets, where one jet is identified as a b-quark jet using displaced secondary-vertex information from the CDF silicon detector. We employ a matrix-element analysis technique to improve separation of signal and background and greatly improve the sensitivity of our search.

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