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Search for Single Top Quark Production at CDF II SARAH BUDD,

University of Illinois at Urbana-Champaign — The electroweak production of single top quarks has been sought after since the discovery of the top quark more than 10 years ago. The measurement of the cross section for single top quarks provides sensitivity to the CKM element V_{tb} and is sensitive to various models of physics beyond the standard model. CDF uses several multivariate techniques to search for s-channel and t-channel single-top production, as well as the combined process, using 1 fb⁻¹ of proton-antiproton collision data. Results are given for two of these techniques, one using likelihood functions and one using neural networks.

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