## Abstract Submitted for the IT05 Meeting of The American Physical Society

Search for Single Top Quarks Produced via Flavor-Changing Neutral-Current Couplings at DØ ANN HEINSON<sup>1</sup>, University of California, Riverside, DZERO COLLABORATION — The large mass of the top quark, close to the electroweak symmetry-breaking scale, makes it a good candidate for probing physics beyond the Standard Model, including possible anomalous couplings. One form these couplings can take is with flavor-changing neutral currents, which can give rise to a single top quark in the final state through gluon exchange, together with a c or u quark in the initial or final state. We search for single top quark production through both the t-c-g and t-u-g couplings, using the DØ detector at the Fermilab Tevatron collider, and present limits on the anomalous coupling parameters  $\kappa_c/\Lambda$  and  $\kappa_u/\Lambda$ , where  $\Lambda$  defines the scale of new physics and  $\kappa_c$  ( $\kappa_u$ ) defines the strength of the t-c-g (t-u-g) couplings.

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