

Abstract Submitted  
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**Measurement of CP Violation In Single Top Production**

WEIGANG GENG, Michigan State University, D0 COLLABORATION — We present the study of CP violation in single top quark production at the D0 experiment at the Fermilab Tevatron. CP violation in the top electroweak interaction results in different single top quark production cross sections for top and antitop quarks. We consider the asymmetry in the total number of leptons ( $\ell^+$  and  $\ell^-$ ) in the final state. We perform the search separately in the electron+jets and muon+jets final states using  $5.4 \text{ fb}^{-1}$  of data.

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