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Measurement of the top quark electric charge JEONG KU LIM, Korea University, D0 COLLABORATION — In the Standard Model, the electric charge of the top quark is predicted to be 2/3 of the electron charge. Experimentally, the more exotic possibility of 4e/3 is not excluded yet. We present the method to measure the top quark charge, which is based on b and $\bar{b}$ jet charge templates obtained by applying a jet charge algorithm to b-tagged jets. In this talk, we present the measurement of the top quark charge using $t\bar{t}$ vents in the lepton+4jets final state with two identified b-jets, using 5.4 fb^{-1} of data recorded with the D0 detector at the Fermilab Tevatron collider.

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