

Abstract Submitted
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Measurement of the top quark electric charge JEONGKU LIM,
Korea University — 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 anti-b jet charge templates we get by applying a jet charge algorithm to b tagged jets. In this talk, we present the measurement of the top quark charge using top quark pair events in the lepton+4jets final state with two identified b-jets, using 5.4/fb of data recorded with the D0 detector at the Fermilab Tevatron collider.

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