

Abstract Submitted
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Extracting the Mass of the Top Quark from All-Jet Events in D0 Data GIANLUCA PETRILLO, University of Rochester, D0 COLLABORATION — Six-jet events arising from decays of $t - \bar{t}$ pairs in which both tops decay into a W boson and a b quark, and both W s decay into quark-antiquark pairs, constitute a potentially rich source of completely reconstructed top quarks. Despite the large background from pure jet production, these events form an excellent sample of data for measuring the mass of the top quark. But, even when two of the jets are tagged as likely descending from b quarks, the background is still large, and the mass analysis is complicated by uncertainties in assigning the four other jets to their progenitor quarks. We describe a mass extraction technique that addresses these issues, and present preliminary results from applying the method to 5.4fb^{-1} data recorded by the DØ experiment at the Fermilab Tevatron.

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