Background model for measurement of top mass in fully hadronic channel at D0

AYESH JAYASINGHE, University of Oklahoma, D0 COLLABORATION — We present the status and describe the measurement of the top quark mass using the all hadronic final state from data collected with the D0 detector at the Fermilab Tevatron. The data sample selected for this analysis consists of six or more hadronic jets with two jets required to have a secondary vertex, which is indicative of a $b$ quark jet. A multivariate discriminant is used to separate signal from background. The background is modeled using a sample of four and five jet events to which is added the appropriate number of additional jets with the jets taken from six jet events. The tuning of this model and its comparison to data will also be discussed.

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Date submitted: 10 Jan 2011