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A study of $Z \to b\bar{b}$ at Tevatron SUNEEL DUTT, SUMAN BALA, Panjab University, PER JONSSON, Imperial Collage London, D0 COLLABORATION — The energy measurement of b-quark jets suffers from biases due to the peculiarities of hadronization and decay of origionating B-hadron. The impact of these effects can be estimated by reconstructing the mass of $Z \to b\bar{b}$. From the sample of $2fb^{-1}$ of Data collected by D0 experiment $p\bar{p}$ collisions at Tevatron, we will show how Z signal can be identified and measured. The measurement of reconstructed mass of Z can be used to determine the jet energy scale factors for b-quark jets which allows a reduction of uncertainity in high p_T physics analysis. This analysis can help to explore suitable triggering and other necessary tools for Low mass Higgs discovery at Tevatron.

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