

Abstract Submitted
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A Combined Tracking & Calorimetry Jet Energy Scale at D0

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— Currently, D0 jets from p-p(bar) collisions are reconstructed using the signals from a liquid Argon - Uranium sampling calorimeter. Previous work has shown an algorithm combining the precision of the D0 sampling calorimeter at high momenta and the precision of the magnetic tracker at low momenta can significantly improve the raw jet energy resolution. Using the framework of the current calorimeter-only jet energy scale at D0 a new track and calorimeter jet energy scale can be calculated so a direct comparison between the two methods can be made. The modifications of the calorimeter- only jet energy scale are reported, and the resultant improvement in jet energy resolution is demonstrated.

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