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Study of Cell Energy Thresholds in CMS Calorimeters for Jet Reconstruction JAMES DOLEN, R. DEMINA, C. JUSTUS, P. TIPTON, M. ZIELINSKI, University of Rochester, A. BHATTI, Rockefeller University, CMS COLLABORATION — Noise in the calorimeter of the Compact Muon Solenoid (CMS) can have a significant impact on the reconstruction of low P_T jets. Since noise is associated with individual readouts of calorimeter channels, and the average noise levels vary significantly for different compartments, it is natural to suppress energies of individual hits when building towers for reconstruction of jets and MET. We have proposed new thresholds for calorimeter hits, which are effective in reducing noise contributions to jets, while removing less real jet energy than the often-used cuts on whole towers. The effect of these new thresholds on efficiency, resolution, and fake rate will be presented.

Sarah Eno
U. Maryland

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