Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Search for New Physics in the Dijet Centrality Ratio in CMS DANIEL MINER, U of Rochester, CMS COLLABORATION — We describe a search for new physics in dijet production, using the early LHC pp data at $\sqrt{s} =$ 7 TeV recorded by the CMS detector at CERN. The study is based on the dijet centrality ratio, which is the ratio of the number of events where the two leading jets have pseudorapidity $|\eta| < 0.7$ to the number where both leading jets have $0.7 < |\eta| < 1.3$. The dijet centrality ratio is a measure of the angular distribution of the dijets and is sensitive to deviations from the standard model. We measure the centrality ratio as a function of the invariant mass of the dijet system and find good agreement with the predictions of QCD, allowing us to set limits on the presence of new physics.

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Date submitted: 13 Jan 2011 Electronic form version 1.4