

Abstract Submitted  
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**CMS Search Plans for Contact Interactions Using Jets** DAVID MASON, Fermilab, CMS COLLABORATION — Contact interactions arising from quark compositeness or other sources of physics beyond the standard model can produce large signals in jet events at LHC. The inclusive jet transverse momentum distribution is sensitive to an unexplored contact interaction scale  $\Lambda$  with only  $10 \text{ pb}^{-1}$  of integrated luminosity. Studies of the jet response versus pseudorapidity at CMS are presented. Uncertainties due to jet energy scale and parton distributions of the proton are discussed. With the dijet ratio CMS will search for the affects of a contact interaction in dijet angular distributions. Sensitivity to  $\Lambda$  for integrated luminosities of  $10 \text{ pb}^{-1}$ ,  $100 \text{ pb}^{-1}$ , and  $1 \text{ fb}^{-1}$  are presented.

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