

Abstract Submitted  
for the APR12 Meeting of  
The American Physical Society

**Search for New Physics with a Monojet and Missing Transverse Energy in 7 TeV pp collisions at CMS** MEHMET VERGILI, Cukurova University/LHC Physics Center Fermilab, THE CMS COLLABORATION — We present a search for new physics in events with a single energetic jet and large missing energy in proton-proton collisions at a center-of-mass energy of 7 TeV. The search is performed using data collected by the CMS detector and corresponding to an integrated luminosity of  $4.7 \text{ fb}^{-1}$ . The topology is a signature of many new physics models, including large extra dimensions in the framework of ADD, Unparticle production and several dark matter scenarios. Results are interpreted within the context of each of these models, including the production of dark matter.

Anwar Bhatti  
The Rockefeller University

Date submitted: 09 Jan 2012

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