Abstract Submitted for the APR10 Meeting of The American Physical Society

Calibration of the CMS Hadronic Calorimeter with cosmic rays and early LHC beam data STEVEN WON, Northwestern University, CMS COLLABORATION — We present an analysis of cosmic muon data (taken with and without magnetic field) and LHC early beam data taken in late 2009. Cosmic ray results provide invaluable validation of initial calibration and offer the possibility of verification of the absolute energy scale of the calorimeter, while LHC beam data allows measurement of the relative smoothness of energy deposited across the detector. These data represent the best and final opportunity to better understand the behavior of the detector, as the calibration constants extracted from this analysis will be used during the first year of data taking with collisions.

Steven Won Northwestern University

Date submitted: 21 Oct 2009 Electronic form version 1.4