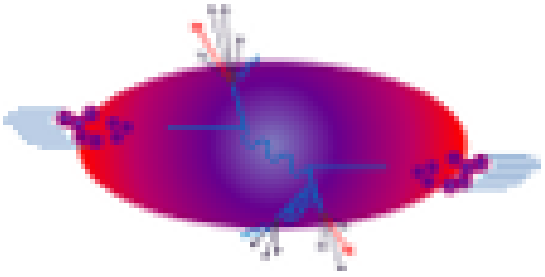

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W/Z + jets with the CMS detector

Tuesday 19 April 2011 11:15 (25 minutes)

We present a study of jet production in association with W and Z bosons in proton-proton collisions at ECM=7 TeV using the full 2010 data set collected by CMS corresponding to an integrated luminosity of 36+-4 pb-1. The production of vector bosons with jets provides a stringent and important test of perturbative QCD calculations, and is an important background in searches for new physics and for studies of the top quark. Jet reconstruction in this particular final state topology is also made more difficult by the presence of leptons from the vector boson decay in the final state. A precise measurement of the cross section and an understanding of lepton and jet kinematics is therefore essential. We report the normalized inclusive rates of jets produced as well as the ratios sigma(V+(n+1) jets)/sigma(V+n jets) and with a jet threshold of 30 GeV. We also present the first test of the Berends-Giele scaling at 7 TeV.

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