

Title : W/Z Physics at CMS

W and Z gauge boson production has been among the first physics studied by the CMS experiment at the LHC. In this talk I discuss recently published CMS measurements of the $Z \rightarrow \ell\ell$ and $W \rightarrow \ell\nu$ inclusive cross sections performed with 2.9 pb^{-1} . Events are selected for the analysis by requiring the presence of energetic, isolated electrons or muons. The presence of an energetic neutrino is demonstrated using the distribution of missing transverse energy (MET). I review lepton and MET reconstruction and identification in CMS and describe “data-driven” techniques employed in the estimation of efficiencies, in the tuning of Monte Carlo simulation and in the determination of the contributions of the most important backgrounds. I present W and Z kinematic distributions, yields and the extracted cross-sections and discuss the evaluation of experimental uncertainties. The results I describe are not only a crucial benchmark of detector performance and analysis techniques for CMS, they are also an important test of Standard Model predictions at the unprecedented LHC center-of-mass collision energy of 7 TeV.