

# Measurement of W gamma and Z gamma production at the LHC

*vendredi 22 juillet 2011 17:30 (15 minutes)*

Measurements are presented of high energy photons produced in association with W and Z bosons in pp collisions

at  $\sqrt{s} = 7$  TeV using the ATLAS detector. The analysis uses W and Z bosons selected with leptonic ( $e/\mu$ ) decays. Subsets of these events are identified by demanding an electromagnetic object passing isolated photon selection

criteria. We isolate signals of  $p + p \rightarrow l + \nu + \gamma + X$  and  $p + p \rightarrow l + l + \gamma + X$  production

with photon  $E_T > 15$  GeV and  $\text{delatR}(l - \gamma) > 0.7$ . The production cross sections and the kinematic distributions of the leptons and photons are compared to Standard Model predictions. The measurements are sensitive to the

electroweak triple gauge couplings of the Standard Model, and constraints are set on anomalous TGCs.

**Auteur principal:** Dr BARONCELLI, Antonio (INFN / Roma TRE)

**Orateur:** WANG, Song-Ming

**Classification de Session:** Top and Electroweak Physics

**Classification de thématique:** Top and Electroweak Physics