

## Measurement of neutral mesons at ALICE by means of one photon detected in electromagnetic calorimeter and another from its conversion in central tracking system

Measurement of neutral meson production from photon decays at ALICE experiment is performed by means of two electromagnetic calorimeters (EMCAL and PHOS) and/or conversion of photons in central tracking system. For two and more photon decaying mesons ( $\pi^0$ ,  $\eta$ ,  $\omega$ ) a possibility of combined calorimetry and conversion measurement is explored. It allows an independent cross check of data and systematic uncertainties given by two general approaches.  $\pi^0$  spectrum from proton-proton collisions at  $\sqrt{s} = 7$  TeV is presented from the analysis of 2010 data where one photon detected in EMCAL and another from its conversion. Spectrum is compared with separate measurement in each calorimeter. Perspectives of the applicability of combined calorimetry and conversion measurement are shown for 2011 data and PbPb collisions.

**Primary author:** BORISSOV, Alexander (Wayne State University)

**Presenter:** BORISSOV, Alexander (Wayne State University)

**Track Classification:** Electromagnetic probes