Contribution ID: **784** Type: **Poster**

Estimation of background for photon-hadron correlations in proton-lead collisions at sqrt(sNN) = 5.02 TeV with ALICE

Tuesday, May 15, 2018 7:10 PM (30 minutes)

This poster presents a study of an estimation of the background for the measurement of photon-hadron correlations in 5.02 TeV proton-lead collisions. Photon-hadron correlations measure the fragmentation function, which may be modified by energy loss in the QGP. The energy of the photon is not affected by the QGP, so it gives information about the energy of the parton prior to interaction with the QGP. This parton fragments into a jet from which the hadron arises. The main background for this measurement are photons from meson decays. This is estimated via a parameterization of the measurement of the pi0 and eta cross sections and theoretical calculations of the direct photon cross-section using JETPHOX and PeTeR. In order to ensure purity of the photon trigger, we investigate template fits to a novel shower shape variable, which is being developed for the ALICE electromagnetic calorimeter.

Content type

Experiment

Collaboration

ALICE

Centralised submission by Collaboration

Presenter name already specified

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Session Classification: Poster Session

Track Classification: Electromagnetic and weak probes