Contribution ID: **348** Type: **2b) Jets and high-pT hadrons (POSTER)**

Isolated photon − charged hadron correlation in pp collisions at $\sqrt{s} = 13$ TeV

Direct photons produced in Compton and annihilation hard process at the leading order can be calculated by perturbative QCD. Photon-hadron correlations in heavy-ion collisions allow us to investigate medium induced jet modifications. Correlations between photon triggers and associated charged hadrons are used to study the jet fragmentation function of away side jets generated together with the direct photons from the same event. Such kind of measurements in pp collisions provide a reference study to understand jet modifications in nucleus-nucleus collisions.

In this analysis, we are using the data taken in 2016 by the ALICE Experiment using a trigger based on electromagnetic calorimeter information. Isolation cuts are used to distinguish the direct photons and π^0 mesons. Charged hadrons are reconstructed using central barrel tracking detectors in ALICE. The azimuthal correlation distributions between isolated photon triggers and charged particles for pp collisions at $\sqrt{s} = 13$ TeV will be shown in the poster, and the per-trigger yield will be extracted from these correlations. Results will be compared to existing ones at lower energies, and to expectations from event generators.

Summary

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Session Classification: Poster Session