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Study of Underlying Event activity in pp and p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV with ALICE.

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One of the most important discoveries at the LHC is the observation of collective-like behavior and strangeness enhancement in small collision systems (e.g. pp and p-Pb collisions). They effects are strikingly similar to those observed in heavy-ion collisions, where they are attributed to the production of a deconfined hot and dense medium, known as strongly interacting Quark-Gluon Plasma. In order to gain insight into the physics mechanisms behind these effects in small systems, in this work we measure Underlying Event (UE) activity in pp and p-Pb collisions at $\sqrt{s_{NN}} = 5.02$ TeV. UE collects contributions from Multi-Partonic Interactions (MPI) as well as particles from initial- and final-state radiation related to the hardest component. The average number density and the average total transverse momentum (p_{T}) as a function of the p_{T} of the leading particle will be presented. Results for three topological regions will be shown: near and away side (sensitive to the jet-like component) and the transverse side (sensitive to UE). Three different cut-off values for track p_{T} are considered. i.e. 0.15, 0.5 and 1 GeV/c. The jet-like component is also analyzed after the subtraction of the UE component. Comparisons between the UE activity for pp collisions at different center of mass energies, and among pp and p-Pb collisions will be shown. Moreover, we will compare the measurements to QCD-inspired Monte Carlo event generators for the three different topological regions.

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