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Color reconnection and flow-like patterns in pp collisions.

Recent data collected at the LHC are confronted with the possible existence of flow in proton-proton collisions. Different Monte Carlo models are used to explain the multiplicity, transverse momenta distributions and other variables that allow characterize proton-proton events. In this work we present a work on the frame of PYTHIA 8 Monte Carlo model, showing that this event generator produces flow-like effects in events with multiple hard subcollisions due to color string formations between final partons from independent hard scatterings, the so called color reconnection. We present studies of different identified hadrons observables in proton-proton collisions at 7 TeV. Studies have been done both for minimum bias and multiplicity intervals in events with and without color reconnection to isolate the flow like effect. We observe this effect in the baryon to meson ratios, like Λ/K_0 s, which has an enhancement at intermediate transverse momentum, behaviour that seems to be effect of the color reconnection.

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