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## Color reconnection effects on resonance production

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Recent studies of high-multiplicity proton-proton (pp) collisions at the LHC have shown that, in these systems, relative resonance production is reduced with respect to minimum-bias interactions. In this work, we present a phenomenological study that shows how multi-parton interactions and color reconnection (CR) affect resonance yields in the PYTHIA8 event generator. It is observed that CR leads to a systematic decrease of relative resonance yields, reducing integrated yield ratios such as  $K^*/K$  and  $\rho^0/\pi$  in high-multiplicity pp collisions. In-depth studies indicate that the underlying mechanism causing this effect is that CR leads to shorter, less energetic strings whose fragmentation is less likely to produce more massive hadrons for a given quark content. These observations suggest an alternate explanation for resonance suppression, which is usually explained as being a consequence of the rescattering of resonance decay daughters in a high-density hadronic medium. Based on Phys. Rev. D 97, 036010 (2018).

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