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Event shape and multiplicity dependence of $K^*(892)^\pm$ mesons at midrapidity in pp collisions at $\sqrt{s} = 13$ TeV with ALICE at the LHC

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Short-lived resonances can probe strongly interacting matter produced in high-energy heavy ion collisions. $K^*(892)^\pm$ resonance is particularly interesting because of its very short lifetime (~ 4 fm/c), comparable to the one of the hadronic phase. Therefore, it may be sensitive to the competing rescattering and regeneration mechanisms which modify the particle's momentum distributions after hadronization. In this poster, recent measurements of resonance production in proton proton (pp) collisions as a function of event multiplicity and transverse sphericity will be presented, exploiting the large sample of pp collisions at $\sqrt{s} = 13$ TeV collected by ALICE. These measurements show the onset of phenomena typical of heavy-ion collisions, like collective behaviour and suppression of the yield ratios of short-lived resonances to stable particles with increasing multiplicity. In addition, new preliminary results for charged-particle multiplicity dependent studies of $K^*(892)^\pm$ production in pp collisions will also be presented.

Authors: ROSANO, Antonina (Universita e INFN, Catania (IT)); DEB, Suman (Indian Institute of Technology Indore (IN))

Presenters: ROSANO, Antonina (Universita e INFN, Catania (IT)); DEB, Suman (Indian Institute of Technology Indore (IN))

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