

Exploring the $\Lambda(1520)$ resonance in high-multiplicity proton–proton collisions at LHC energies with ALICE

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Resonances play a crucial role in probing the characteristic of the hadronic phase, created in ultra-relativistic heavy-ion collisions. Rescattering and regeneration processes influence the measurable resonance yields and p_T spectra shapes. Measurements of resonance productions in high-multiplicity pp collisions could provide insight into the possible presence of a hadronic phase in small collision systems. The $\Lambda(1520)$ resonance, with a lifetime of approximately 13 fm/c, provides additional insights into the hadronic phase compared to the K^{*0} (4 fm/c) and ϕ (46 fm/c) resonances. This contribution presents recent measurement of $\Lambda(1520)$ resonance production in high-multiplicity pp collisions, including p_T integrated yield ($\frac{dN}{dy}$), mean transverse-momentum ($\langle p_T \rangle$), and particle yield ratios as a function of charged-particle multiplicity.

Alternate track

1. Heavy Ions

I read the instructions above

Yes

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