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## Measurements of charm-baryon production and hadronization in pp collisions with ALICE

*Tuesday 13 July 2021 19:48 (2 minutes)*

In this talk, we present the production measurements of  $\Lambda_c^+$ ,  $\Xi_c^{0,+}$ ,  $\Sigma_c^{0,++}$  and the first measurement of  $\Omega_c^0$  baryon performed with the ALICE detector at the midrapidity in pp collisions at  $\sqrt{s} = 5.02$  and 13 TeV. Recent results show that the baryon-to-meson ratios are significantly higher than those measured in  $e^+e^-$  collisions for the different charm-hadron species. These observations suggest that the fragmentation fractions of charm are not universal and that the baryon-to-meson ratio depends on the collision systems. The result will be compared to predictions from Monte Carlo event generators and theoretical calculations based on the statistical hadronization model and on the hadronization via coalescence. In addition, the measurements of charm fragmentation fractions and the charm total production cross section per unit of rapidity at midrapidity, in pp collisions at  $\sqrt{s} = 5.02$  TeV at the LHC will also be shown.

### Preferred track

Hadronic Issues in Heavy-Flavour Physics

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