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# Measurement of $\Xi_c^0$ via semileptonic decay in collisions of pp at 13 TeV and p-Pb at 5.02 TeV with ALICE

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Compared to  $e^+e^-$  and ep collisions, the charm baryon production in pp collisions shows a substantial enhancement. This evidence is currently interpreted in terms of a modification of the hadronization mechanisms in hadronic collisions. Therefore, valuable information on how the charm quarks hadronize can be studied by measuring charm baryon production. In addition, by sorting out the produced baryons by the multiplicity of the event, further information such as the multiplicity dependence of the hadronization process can be assessed. In this study, we report the status of the analysis of the  $\Xi_c^0 \rightarrow \Xi^- e^+ \nu_e$  (and its charge conjugate) baryon by using the LHC Run 2 data collected with ALICE detectors. The measurement of baryon-to-meson ( $\Xi_c^0/D^0$ ) yield ratio as a function of the event multiplicity in pp collisions at  $\sqrt{s} = 13$  TeV and the nuclear modification factor ( $R_{pPb}$ ) in p-Pb collisions at  $\sqrt{s_{NN}} = 5.02$  TeV, respectively, will be shown.

## Category

Experiment

## Collaboration (if applicable)

ALICE

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