## **Strangeness in Quark Matter 2019**



Contribution ID: 109 Type: Poster

## Measurement of the $\Lambda_c$ production in pp, p-Pb, and Pb-Pb collisions with ALICE Run-2 data

Tuesday 11 June 2019 18:45 (2 hours)

The study of production of particles which contain heavy quarks (charm and beauty) provides an exceptional tool to investigate the characteristics of the hot and dense QCD medium, the Quark-Gluon Plasma (QGP), created in ultra-relativistic heavy-ion collisions. In particular, heavy-flavour measurements allow one to study the basic properties of this medium, like its energy density, and to investigate the mechanisms in which quarks interact with the QGP. The measurement of the  $\Lambda_c$  production in Pb-Pb collisions, in addition, provides insights into the mechanisms of charm recombination in the medium and allows us to test the microscopic properties of the QGP.

In this poster, we will present the latest results for the  $\Lambda_c$  production in pp, p-Pb, and Pb-Pb collisions including the charm baryon-to-meson ratio. The impact of the new techniques based on machine learning and deep neural networks used for optimising the  $\Lambda_c$  signal will also be discussed.

## Collaboration name

**ALICE Collaboration** 

## **Track**

Heavy Flavour

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