



Contribution ID: 423

Type: **Parallel Talk**

## Light (anti-)nuclei production and elliptic flow in Pb-Pb collisions at the LHC with ALICE

*Wednesday, May 16, 2018 6:30 PM (20 minutes)*

Results on the production of stable light nuclei, including deuterons,  ${}^3\text{He}$ ,  ${}^4\text{He}$  and the corresponding anti-nuclei, in Pb-Pb collisions at  $\sqrt{s_{\text{NN}}} = 2.76$  TeV and  $\sqrt{s_{\text{NN}}} = 5.02$  TeV will be presented and compared with theoretical predictions to provide insight into the production mechanisms in heavy-ion collisions.

These information will be complemented by new results on the elliptic flow of (anti-)deuterons and  ${}^3\text{He}$ . While one of the approaches to describe the elliptic flow of hadrons and light nuclei is given by quark coalescence, the production of light nuclei is also depicted as a coalescence of nucleons, i.e. hadron coalescence. Differences should be visible for those two approaches when the elliptic flow is measured simultaneously with the transverse momentum ( $p_{\text{T}}$ ) spectra, especially when they are scaled by their number of nucleons and quarks.

The experimental results will be presented giving a critical view of their comparison to the expectations from coalescence and hydrodynamic models that aim at describing both the  $p_{\text{T}}$ -spectra and the elliptic flow.

### Content type

Experiment

### Collaboration

ALICE

### Centralised submission by Collaboration

Presenter name already specified

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