

THE FIRST RESULTS FROM THE LHC PB-PB RUN IN 2015 BY ALICE

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The main goal of the relativistic heavy ion collisions is to study thermal properties of the theory of strong interactions, quantum chromo dynamics (QCD). Currently it is widely accepted that the thermal state of the QCD, called quark-gluon plasma (QGP), is reached in high energy nucleus-nucleus collisions measured at Relativistic Heavy Ion Collider (RHIC) at Brookhaven Nation Laboratory and Large Hadron Collider (LHC) at CERN. Properties of the QGP created in the collisions, such as shear viscosity to entropy ratio, are in the focus of the active measurements. For a broader discussion see e.g. [1].

The ALICE experiment [2] is the dedicated heavy ion experiment at the CERN LHC. At the end of 2015, lead-lead collisions were measured at the LHC with new record center-of-mass energy $\sqrt{s} = 5.02$ ATeV. ALICE published the first eagerly awaited results for the multiplicity density of charged particles just before Christmas 2015 [3].

In my talk I will review the first ALICE results from the lead-lead measurements in the LHC Run 2 that are publicly available at the time of the conference.

[1] Y. Akiba *et al.*, arXiv:1502.02730 [nucl-ex].

[2] K. Aamodt *et al.* [ALICE Collaboration], JINST **3** (2008) S08002. doi:10.1088/1748-0221/3/08/S08002

[3] J. Adam *et al.* [ALICE Collaboration], arXiv:1512.06104 [nucl-ex].