

## **ALICE: recent results and future perspectives**

*Monday, November 26, 2018 11:25 AM (50 minutes)*

ALICE is an experiment designed to study the physics of strongly interacting matter and the quark-gluon plasma (QGP) in nucleus-nucleus collisions at the CERN's LHC. During the Run1 and Run 2 data taking (2010-2018), ALICE has collected valuable data for proton-proton, proton-lead, lead-lead and Xenon-Xenon collisions at different energies. In the presentation, we will summarize the main results towards understanding the high temperature and high energy density matter formed in these collisions, covering observables from the soft sector (bulk particle production and correlations), hard probes (charmed hadrons and jets) and signatures of possible collective effects in pp and p-Pb collisions with high multiplicity. The ALICE collaboration is currently preparing the upgrade of the experiment for Run 3, we will present the planned upgrades together with the future physics outlook.

**arXiv**

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