

Recent results on light nuclei and antinuclei from ALICE at the LHC

The high collision energies reached at the LHC enable significant production rates of light (anti-)nuclei in proton-proton (pp), proton-lead (p-Pb) and in lead-lead (Pb-Pb) collisions.

The excellent particle identification capabilities of the ALICE detector, based on the specific energy loss in the time projection chamber and the velocity information from the time-of-flight detector, are exploited to identify rarely produced particles such as deuterons, ^3H , ^3He , ^4He and their antiparticles, in addition to light hadrons.

We present a comprehensive set of results on the production of light nuclei and anti-nuclei from LHC Run1 and Run2 in all the available collision systems and at various energies, and compare with predictions from thermal (statistical) models and alternatives using coalescence.

Preferred Track

Collective Dynamics

Collaboration

ALICE

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