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(Hyper)nuclei and anti-(hyper)nuclei production in Pb–Pb collisions in ALICE at LHC

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The ALICE detector at LHC allows to study Pb–Pb collisions at the new energy frontier. At this energy almost equal amounts of matter and antimatter are produced in the central rapidity region. Closely related to this is the production of (hyper)nuclei and anti-(hyper)nuclei, which are measured with nearly similar abundances. Based on its high tracking and particle identification capabilities, the ALICE detector allows to investigate this rarely produced (anti-)matter. The production yields of light nuclei and of the (anti-)hypertriton will be discussed. Further, a search for exotic bound states such as the H-dibaryon ( ) and a possible n bound state will be presented. The various results will be compared with thermal and coalescence model predictions.

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