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Helium identification and production at LHCb

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In this contribution, recent results for helium identification and production at LHCb will be discussed. From $\sqrt{s}NN=13$ TeV pp collisions, a nearly background-free sample of more than 105 helium candidates is identified by their ionisation losses in the silicon detectors, combined with information from the calorimeter, the muon chambers and the RICH detector. Combined with the excellent LHCb vertexing capabilities, (anti)helium production from (anti)hypertriton or (anti)Lambda-b decays is studied. In both cases, a rich programme of QCD and astrophysics interest, exemplifying LHCb flexibility in exploring new research fields, is foreseen.

Category

Experiment

Collaboration

LHCb

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