

Measurement of forward eta/pi0 production ratio at LHC $\sqrt{s}=13\text{TeV}$ p-p collision.

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The Large Hadron Collider forward (LHCf) experiment aim to verify the hadron interaction model by using LHC. In this experiment, p-p collision was carried out at $\sqrt{s} = 13\text{TeV}$ in Jun 2015.

Here we report the initial result of forward eta meson measurement. Very forward production of eta meson is highly unknown and has large discrepancy among the cosmic ray interaction models.

Firstly, we verified the energy scale of the calorimeter detectors in the wide energy range by using the reconstructed mass peaks of pi0 and eta mesons. The second, we show the eta/pi0 ratio detected by the LHCf-Arm1 detector and compare with the results of QGSJETII-4 and EPOS-LHC.

Presentation type

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