

First Measurements of Charged-Particle Jet Production in pp Collisions at $\sqrt{s} = 13.6$ TeV with ALICE

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In 2022, the ALICE Collaboration commenced Run 3 with upgrades to the Inner Tracking System (ITS2) and the Time Projection Chamber (TPC), both pivotal for probing rare phenomena with unprecedented precision. The upgrades to ITS2 enable higher tracking resolution, while the improvements to the TPC allow for continuous readout, significantly boosting data acquisition and resolution. Using these enhancements we present the first measurement in ALICE of the charged-particle jet cross section in pp collisions at $\sqrt{s} = 13.6$ TeV using the anti- k_T algorithm ($R = 0.4$). These results showcase the new jet finding capabilities of the ALICE detector and validate data integrity against prior Run 2 measurements.

Category

Experiment

Collaboration

ALICE

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