

Jet fragmentation and charged particle angular distribution within and around jets in Pb+Pb collisions with ATLAS

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Abstract: In this talk, we present the latest measurements of the jet fragmentation and the angular distributions of charged particles within and around jets, as performed with the ATLAS detector in Pb+Pb collisions at the LHC. Jets are direct probes of the QCD medium created in these collisions, and studying jet fragmentation provides insight into the strength and mechanism of jet quenching. Fragmentation functions in Pb+Pb collisions and distributions of the transverse momentum of charged particles are compared to the same quantities measured in pp collisions at the same collision energy. Measurements are presented as a function of jet transverse momentum and jet rapidity at $\sqrt{s_{NN}} = 5.02$ TeV. The charged-particle angular distributions are also measured at distances extending outside the jet radius of $R = 0.4$.

Summary

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