

# Jets and Jet-like Correlations in STAR

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The propagation and modification of hard-scattered partons in the QGP can be studied using various types of jet and jet-like correlation measurements. The STAR detector with its full azimuthal and large pseudorapidity acceptance, as well as its wide transverse momentum coverage, is well-suited for these measurements. Correlations of neutral pions and jet-like clusters at forward rapidity in d+Au collisions are used to probe low  $x$  physics and the possible onset of gluon saturation effects. At mid-rapidity, azimuthal correlations of charged hadrons with the axis of a reconstructed trigger jet are used to study the modification of jet shapes and associated hadron yields from p+p to Au+Au. We also show results that take advantage of STAR's increased particle identification capabilities due to the Time-Of-Flight detector, such as particle ratios associated with reconstructed jets, and dihadron correlations with identified trigger particles. Such measurements will be used to explore the differences between jet-related and bulk-related particle production. The comprehensive set of STAR jet-quenching measurements can be used to further constrain theories of parton energy loss at RHIC.

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