LARGE TRANSVERSE MOMENTUM
AND JET STUDIES

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ABSTRACT

Large Transverse Momentum and Jet Studies

Particle production at large transverse momentum is found to exceed by a large amount what is expected from the collision of two extended objects about 1 fermi across. The pertinent effects are associated with collisions among hadron constituents which materialized as jets of particles. Experimental evidence for a jet configuration is reviewed. A phenomenological analysis of the key features of jet fragmentation is then presented. It is based on the scaling properties of hadronic interactions. Theoretical models are reviewed and in particular the relevance of quantum chromodynamics is assessed. The paper ends with a discussion of future prospects at present machines and also considers the use of present synchrotrons in their collider version.
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