-- MarthaCeciliaDuranOsuna - 2016-10-12

MET (Missing transverse momentum) is the imbalance in the transverse momentum of all *visible* particles, particles which interact with the electromagnetic or strong forces, in the final state of collisions. Because momentum is conserved in each direction, MET is the transverse momentum that must have been carried by something *invisible*. Neutrinos, for example, are invisible particles; therefore, MET is an estimate of transverse momentum of neutrinos. We use MET in measurements of W bosons, top quarks, and tau leptons as these particles can decay into neutrinos. Further, many models of physics beyond the Standard Model predict the existence of particles or something else which are invisible and can carry momentum; e.g., Dark Matter models, supersymmetric models, unparticle models, and models with large extra dimensions. For this reason, we use MET to test such models.

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