

Jet Energy Calibration and Transverse Momentum Resolution in CMS

vendredi 22 juillet 2011 09:15 (15 minutes)

We present results on the jet energy calibration and jet transverse momentum resolution at CMS. In-situ measurements are performed using couple of 100/pb of proton-proton collisions at 7 TeV center of mass energy. The transverse momentum balancing in dijet and photon/Z+jet events is used to measure the jet energy response in the CMS detector, as well as the transverse momentum resolution. The results are presented for three different approaches to reconstruct jets in the CMS: calorimeter-based jet reconstruction; the Jet-Plus-Track algorithm, which improves the measurement of calorimeter jets by exploiting the associated tracks; the Particle Flow method, which attempts to reconstruct individually each particle in the event, prior to the jet clustering, based on information from all relevant sub-detectors.

Auteur principal: Dr KRAMMER, Manfred (HEPHY, Vienna)

Orateurs: IASHVILI, Ia (SUNY Buffalo); Dr KRAMMER, Manfred (HEPHY, Vienna)

Classification de Session: Detector R & D and Data Handling

Classification de thématique: Detector R & D and data handling