Quark Matter 2015 - XXV International Conference on Ultrarelativistic Nucleus-Nucleus Collisions



Contribution ID: 681

Type: Contributed talk

## Angular distributions of the quenched energy flow from dijets with different radius parameters in CMS

Monday 28 September 2015 15:10 (20 minutes)

One of the first observations of the flow of the quenched energy in imbalanced dijet events has been through the studies of transverse vector sum of particles with the CMS detector, namely the missing  $p_T$  measurement. The results have led to new theoretical insights to order to explain the wide angle radiation, such as "jet collimation", "color decoherence", "turbulence cascade" and "hydrodynamical expansion of quenched energy". These mechanisms could give different angular distribution of quenched energy. In this talk, the missing  $p_T$  technique has been improved so that it allows the study of angular distribution of the energy flow with respect to the dijet axis. Moreover, in order to get insights about the number of particles which carry the quenched energy, charged particle multiplicity differences in the leading and subleading jet hemispheres are measured. In addition, the measurements are performed using different resolution parameters in anti- $k_T$ clustering algorithm, which provide information about how the angular distribution of the quenched energy depends on the jet width.

## On behalf of collaboration:

CMS

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Track Classification: Jets and High pT Hadrons