



Contribution ID: 311

Type: **Contributed talk**

## Semi-inclusive charged jet measurements in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV with STAR

*Tuesday 29 September 2015 15:00 (20 minutes)*

In this talk we report measurements by the STAR collaboration of the semi-inclusive yield and azimuthal distribution of reconstructed charged jets recoiling from a high  $p_{T}$  hadron trigger, in central and peripheral Au+Au collisions at  $\sqrt{s_{NN}} = 200$  GeV. Corrections for the large underlying background to jet observables in heavy-ion collisions are carried out on an ensemble-averaged basis using a novel event-mixing technique, without imposition of a fragmentation bias on the reported jet population. Charged recoil jets with a transverse momentum up to 34 GeV/c are reported without a low- $p_{T}$  cutoff, for jet radii up to  $R=0.5$ . We compare the measurements to theoretical calculations and to similar jet measurements at the LHC. These measurements provide insight into the nature of jet quenching, and may probe the quasi-particle degrees of freedom in the Quark-Gluon Plasma.

### **On behalf of collaboration:**

STAR

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**Session Classification:** Jets and High  $p_T$  Hadrons IV

**Track Classification:** Jets and High  $p_T$  Hadrons