
Contribution ID: **41** Type: **Contributed Talk**

# Measurement of Bottom contribution to the non-photopic electron production in p+p collisions at sqrt(s)=500 GeV at STAR

*Thursday, 30 June 2016 11:20 (20 minutes)*

Measurements of non-photonic electron(NPE) production at RHIC show similar suppression as light hadrons at high pT in central Au+Au collisions with respect to scaled p+p collisions. However, the interpretation is complicated by the combined contributions from charm and bottom decays. It is important to separate out the bottom contribution for a better understanding of heavy flavor production and energy loss mechanism in ultra-relativistic heavy ion collisions. Azimuthal correlations between non-photonic electrons and charged hadrons have been shown to be a powerful tool to disentangle charm and bottom contributions in p+p collisions.

We will report the preliminary results of the azimuthal correlations between non-photonic electrons and charged hadrons at mid-rapidity for 2.5 < pT(NPE) < 12.5 GeV/c in p+p collisions at sqrt(s)= 500 GeV. The correlation distributions are fitted with PYTHIA templates to extract the relative contribution of bottom decays to non-photonic electrons. These results are compared with pQCD theoretical calculations, and the results from p+p collisions at sqrt(s)=200 GeV. They may provide a precise p+p reference to study bottom production in heavy-ion collisions at RHIC.

## On behalf of collaboration:

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**Session Classification:** Particle Production