



Yale

---

# Review of Hot Quarks Proceedings, “Cold nuclear matter effects on jet suppression in heavy-ion collisions”

---

21. November, 2016

Dear Referee,

thank you for your suggestions for improvement. I have included them and updated my document. Find my comments to your questions and suggestions below.

Kind regards,  
Eliane Epple

## 1 Referee's comments

Thanks for the interesting results. Please find my comments below.

This article discusses→This proceedings discusses.. change article to proceedings everywhere.

**Done**

Since charged jets stem from higher pT partons than jets including also the neutral component for the same reconstructed jet pT,... -> Comparing to full jets including the neutral component for the same reconstructed jet pT, charged jets on average stem from higher pT partons, which contribute to the differences in the pT dependence of the RpPb for the two jet types.

**Changed to: Comparing to full jets including the neutral component for the same reconstructed  $\rho_T^{jet}$ , charged jets on average stem from higher  $\rho_T$  partons. Thus, ...**

These two arguments->These two considerations

**Done**

The analysis was performed on ~90 million minimum bias events of pA-Pb collisions-> This analysis used ~90 million p-Pb minimum bias events

**Done**

two kT-background jets ->two jets ??

**I want to distinguish between background jets (which were reconstructed with a  $k_T$  jet finder) and signal jets (which were reconstructed with a anti- $k_T$  jet finder).**

Since the momentum density of the underlying event in p-Pb collisions is about two orders of magnitude lower than in Pb-Pb collisions, extra corrections had to be applied.->Please be clearer. Sounds like having low UE is a bad thing, but I don't think this is what you mean.

**Changed it to: The momentum density of the underlying event in p-Pb collisions is about two orders of magnitude lower than in Pb-Pb collisions, which causes the background to be scarcely populated in some areas.**

Figure 1 combines the so-obtained ->Figure 1 combines the final

**Done**

Figure 1: it would be better if label  $\rho^{ch+em}$  can be replaced with  $\rho_{full}^{BKG,corr}$  to be consistent. Also the blue points are not explained.

**Done**