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High p_T Non-photonic Electron Measurements in d+Au and p+p collisions using EMC-trigger at $\sqrt{s_{NN}}$=200 GeV at STAR

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Heavy quarks (charm and bottom) measurements in d+Au and p+p collisions are critical references to the understanding of heavy quark production in the hot and dense matter created at RHIC. These measurements also provide a crucial test to the pQCD. Measuring electrons from heavy quark semi-leptonic decay (non-photonic electron) is one major way to study heavy quark production at RHIC.

We will present results from high p_T non-photonic electron measurements at mid-rapidity in year 2008 d+Au and p+p collisions at $\sqrt{s_{NN}}$=200 GeV using the datasets from Electromagnetic Calorimeter (EMC) triggers in STAR detectors. By combining a set of EMC triggers with different thresholds, we are able to make measurements of non-photonic electrons at $p_T > 2$ GeV/c up to about 10 GeV/c. During this run, STAR reduced the material before the TPC by a factor of 10 by removing the inner silicon detectors. This significantly enhances the signal to background ratio of our measurements and provides a crucial opportunity to understand the discrepancy between PHENIX and STAR. We will compare our results with the currently published results at RHIC.