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Non-photonic electron-hadron azimuthal correlation for $\sqrt{s_{NN}}=200$ GeV AuAu collisions at STAR/RHIC BERTRAND BIRITZ, UCLA — STAR's measurements on di-hadron correlations in Au+Au and Cu+Cu have shown a suppression of high-pt hadron yields and modifications in the azimuthal correlation. This modified correlation function suggests a broadening on the away-side. A similar pattern has been observed in the correlation triggered by non-photonic electrons, which represent the directions of heavy quarks. Study of the particle emission pattern in the dense QCD medium will provide insight on the mechanism responsible for the pattern and the flavor dependence. This talk will present preliminary STAR results of azimuthal correlations between non-photonic electrons and hadrons in Au+Au at $\sqrt{s_{NN}}=200$ GeV and compare them to results for Cu+Cu at $\sqrt{s_{NN}}=200$ GeV. This comparison allows one to study the system-size dependence of heavy quark energy loss and emission broadening of its associated particles.

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