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System size dependence of two particle azimuthal correlations in $Cu + Cu$ and $Au + Au$ collisions at $\sqrt{s_{NN}} = 200GeV$ at RHIC CHRISTINE NATTRASS, Yale University, STAR COLLABORATION — Studies of jets at RHIC have led to exciting results such as jet suppression and long-range pseudorapidity correlations, called the "Ridge." Different mechanisms for both phenomena may be distinguished through the study of identified particles in jets. The intermediate p_T region, where recombination and coalescence models have been successful, is of particular interest. Studies of $\Lambda, \bar{\Lambda}, K^0_S$, and $\Xi^{\pm}$ production in jets using azimuthal and pseudorapidity correlations in Cu+Cu collisions at $\sqrt{s_{NN}} = 200GeV$ are presented. The dependencies of the long range pseudorapidity correlations and near side jet-like correlations on particle type, transverse momentum, system size, and centrality are presented and compared to analyses performed in Au+Au collisions at $\sqrt{s_{NN}} = 200GeV$. These results help distinguish between particle production mechanisms.

Christine Nattrass
Yale University

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