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What do jet correlation measurements tell us about the sQGP at RHIC-PHENIX?

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Jet correlations in relative azimuth provide a powerful tool to investigate the hot dense medium created in heavy-ion collisions at RHIC. Hard scattered partons traversing hot dense medium can lose energy before fragmenting into hadrons. Such an energy loss should result in significant modification to jet yields and shapes. PHENIX collected 0.24 nb^{-1} Au+Au in year 2004 and 3.0 nb^{-1} Cu+Cu data in year 2005 respectively, thus provide us an ideal place to do a systematic study on the evolution of jet properties as a function of transverse momentum, centrality, reaction plane orientation and colliding systems. We will present recent results from jet correlation measurement in PHENIX with an emphasis on the strong modification of away side jet shape in intermediate $p_T(2-4\text{GeV}/c)$ and on the suppression of away side jet yields in high $p_T(>5\text{GeV}/c)$. Their implications about the hot dense medium will also be discussed.