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Jet studies in STAR via di-jet (2+1) correlations in d+Au and Au+Au HUA PEI, University of Illinois at Chicago, THE HEAVY-ION EXPERIMENT GROUP AT UIC COLLABORATION, STAR AT RHIC AT BNL COLLABORATION — We report a correlation work for Au+Au and d+Au collisions at $\sqrt{s} = 200\text{GeV}$ from STAR experiment at RHIC. This correlation is defined as a three-particle technique called “2+1”, by using a di-jet trigger of two back-to-back high-pT particles including both charged hadrons and high-energy photons. This analysis explores the relative distributions of soft hadrons with the two triggers. The trigger p_T ranges are varied to control the relative strength of jet modification. In contrast to those di-hadron correlations with a single high- pT trigger, the associated hadron distributions in our “2+1” analysis reveal no modification in either $\Delta\phi$ or $\Delta\eta$ from d+Au to central Au+Au collisions. The present results indicate that di-jet triggered correlations select those jets that undergo no interactions or energy-loss with the medium created in collisions. The associated yields and trigger rates for such di-jets are studied as a function of N_{part} to provide additional insights into medium properties.

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