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Status of Jet Reconstruction in Cu+Au collisions at 200 GeV from PHENIX

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Status of Jet Reconstruction in Cu+Au collisions at 200 GeV from PHENIX

Jet reconstruction in heavy ion collisions is a vital tool to explore medium effects, including energy loss and modification of parton fragmentation functions. In 2012, making use of the unique capabilities of RHIC to collide different nuclei, the PHENIX experiment collected a large dataset of Cu+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. Studying reconstructed jets in collisions of asymmetric heavy ions is crucial in understanding the interplay between collision geometry and initial and final state effects. In central Cu+Au collisions, the Cu nucleus is completely embedded within the Au nucleus. The study of Cu+Au collisions as a function of centrality can help disentangle the 'core' of the collision region, characterized by a large energy density, and the outer 'corona' region.

We will present the status of jet reconstruction in Cu+Au and a reference sample of p+p collisions at 200 GeV using the anti-kT algorithm.

On behalf of collaboration:

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