

10th International Conference on Hard and Electromagnetic Probes of High-Energy Nuclear Collisions



Contribution ID: 253

Type: Poster

Direct Photon and π^0 Identification in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV in the STAR Experiment

Tuesday, June 2, 2020 7:30 AM (1h 20m)

Jets recoiling from a direct-photon have long been seen as a golden probe of the quark gluon plasma created in relativistic heavy ion collisions, due to the ability to tightly constrain the initial hard scattering kinematics. Until recently, the ability to measure this channel and the ensuing observables at RHIC were largely statistics-limited, owing to the small cross-section of direct photon production compared to, for example, the most abundant di-jet cross-section. In this poster, we will present methods for identifying direct photons and π^0 , using the 13 nb^{-1} of $\sqrt{s_{NN}} = 200$ GeV Au+Au data recorded in 2014 by the STAR experiment.

Collaboration (if applicable)

STAR

Track

Jets and High Momentum Hadrons

Contribution type

Poster

Author: STAR COLLABORATION

Presenter: EWIGLEBEN, Annika (Lehigh University)

Session Classification: Poster session

Track Classification: Jets and High Momentum Hadrons