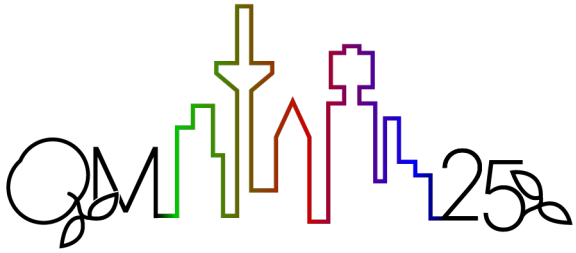

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sPHENIX photon-jet measurements in proton-proton collisions

The sPHENIX detector at the Relativistic Heavy Ion Collider (RHIC) is designed to study the small scale structure of the quark-gluon plasma (QGP) created in heavy ion collisions. Jets, produced in hard scatterings early in the collisions, provide an ideal probe for the full evolution of the QGP. Jets produced back-to-back with photons are an ideal probe of the QGP as the photons do not interact with the medium and provide an unquenched tag of the jet kinematics. Measurements of photon-jet pairs in proton-proton collisions provide a baseline for quenching measurements in Au+Au, and allow for a data-driven measurement of the jet energy scale. In RHIC Run-24, sPHENIX sampled 107/pb of p+p collision data with high-pT jet and photon triggers. This poster will present the status of measuring photon-jet production in this dataset.

Category

Experiment

Collaboration (if applicable)

sPHENIX

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