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Photon-triggered jet reconstruction at the STAR experiment DEREK ANDERSON, TAMU, STAR COLLABORATION — Jets – collimated sprays of hadrons – are produced by the hard scattering of partons in the early stages of a heavy-ion collision, which makes them powerful probes of the hot, dense medium created in such a collision. In particular, the study of away-side jets in events tagged by high transverse-momentum "direct photons" should provide a measurement of the energy lost by a parton as it traverses the medium[1]. Since the direct photon does not interact strongly with the medium, it closely approximates the initial energy of the outgoing parton from which it scattered. This talk will give an overview of the methods with which STAR is pursuing such a measurement. A brief review of the results of γ-hadron correlations[2] and a brief update on the status of the ongoing γ-jet analysis in STAR will be presented.

[1]X.-N. Wang, Z. Huang, and I. Sarcevic, Phys. Rev. Lett. 77, 231 (1996)
[2]arXiv:1604.01117v2 [nucl-ex]

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