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Charged Particle Tracking Efficiency in Proton-Proton Collisions at STAR ALEK HUTSON, Lamar University, STAR COLLABORATION — Distributions of charged particles within jets produced in proton-proton collisions may provide new insight into the process of hadronization, e.g. improved constraints on gluon fragmentation functions. The Solenoidal Tracker at RHIC (STAR) is well equipped to identify charged particles produced within the aforementioned jets. One instrument within STAR, the Time Projection Chamber (TPC), provides a means to track these charged particles by measuring the time of detection and energy of ionized electrons. A crucial component to this analysis is understanding the charged particle tracking efficiency within the TPC. This can be studied with tools such as Monte Carlo simulations embedded into real data, e.g. those collected during the 2011 RHIC run of proton-proton collisions at $\sqrt{s} = 500$ GeV. The presentation will include the status of the described analysis.

Alek Hutson
Lamar University

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