Generating a "Clean" Sample of π^0's and η's for Energy-Calibrating the STAR Endcap Calorimeter LAUREN SKINIOTES, Valparaiso University, STAR COLLABORATION — The Solenoidal Tracker at RHIC (STAR) detector, located at Brookhaven National Laboratory, utilizes polarized-proton collisions to explore the contributions made by sea quarks and gluons to the known proton spin. An important component of STAR is the Endcap Electromagnetic Calorimeter (EEMC), which detects, among other particles, photons produced in the pseudorapidity range $1 < \eta < 2$ from beam-beam collisions and measures their energy. The quality of these energy measurements depends on accurately calibrating the energy response of the EEMC. STAR has used minimum-ionizing particles (MIPs) for this calibration. An independent energy calibration method uses reconstructed neutral pions (π^0) and etas (η) obtained, ideally, from a "clean" event sample with minimum contamination from background. By refining sample selection criteria, background is reduced, thus leaving a "clean" sample of π^0's and η's. These "clean" samples will be used to verify the energy calibration of the EEMC obtained using MIPs.

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