

Abstract Submitted
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Calibration of the Shower Maximum Detector in the Barrel EMC at STAR KARA FARNSWORTH, SASKIA MIODUSZEWSKI, MARTIN CODRINGTON — The STAR detector at RHIC was designed to measure properties of the quark-gluon plasma (QGP), a deconfined medium of quarks and gluons produced in high-energy heavy-ion collisions. The measurement of γ -jet (in which a direct photon is produced back-to-back with a jet) is a particularly good probe of the density of the produced medium. However background photons, like those from π^0 decays, can contribute to the selection of high-energy direct photon trigger particles. To distinguish between direct and decay photons, the shower profile in the Barrel Shower Maximum Detector (BSMD) of the Barrel Electromagnetic Calorimeter (BEMC) is analyzed. The BSMD has very good spatial resolution ($\Delta\phi \sim 0.007$ rad \times $\Delta\eta \sim 0.007$), and a refined calibration promises to improve its performance in γ/π^0 discrimination. A summary of the quality assurance and calibration performed on the BSMD strips will be presented.

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