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**Particle Identification in the MPC-EX Detector at the PHENIX Experiment** ROBERT READ, VINCENT ANDRIEUX, CHRISTINE AIDALA, University of Michigan, PHENIX COLLABORATION — One of the newest additions to the PHENIX experiment at the Relativistic Heavy Ion Collider (RHIC) is a Si-W electromagnetic preshower detector, the MPC-EX, which extends the capabilities of the existing forward region electromagnetic calorimeter (MPC). The addition of the MPC-EX allows for reconstruction of neutral pions at higher energy and transverse momentum than previously possible with only the MPC. The new detector enables resolution of single photons from neutral pion decay for pion momenta up to 80 GeV/c; the previous limit was approximately 15 GeV/c. A primary motivation for the MPC-EX was to continue investigations into various transverse single-spin asymmetries seen at RHIC, including for neutral pion and eta meson production. The MPC-EX was installed in late 2014 and took its first data during PHENIX Run-15, with  $\sqrt{s_{NN}} = 200$  GeV p+p, p+Au, and p+Al collisions with the proton beam transversely polarized. To capitalize on the new capabilities of PHENIX with the MPC-EX, it is essential to identify the different particles in the detector. The status of particle identification using this detector will be presented with emphasis on identifying minimum ionizing particles and key neutral hadrons through their associated electromagnetic decay products in the MPC-EX.

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