Electron identification at STAR and the Barrel Preshower detector MATTHEW CERVANTES, Texas A&M Cyclotron Institute, STAR COLLABORATION — The Barrel Electromagnetic Calorimeter (BEMC) in the STAR experiment at RHIC is a sampling lead scintillator consisting of 4800 towers. The data from the first 2 layers of each tower is read out separately and formally defines the Barrel Preshower (BPRS) detector. The BPRS distinguishes between electrons developing a shower early in the calorimeter tower as opposed to interactions that occur beyond these first 2 layers. We will report on the commissioning of the BPRS into the STAR detector and its implementation into an electron-based analysis. We present the standard method of particle identification currently used for electron selection and investigate the effect of using the BPRS detector. Comparison of such an analysis with and without the BPRS will be shown.

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