



FIG. 1: Top panel: Base $\pi^0 \rightarrow \gamma\gamma$ selection with π^0 peak evident. Middle Panel: π^0 candidates with at least one photon passing the “Loose” PSD hadron requirements. Bottom Panel: π^0 candidates with at least one photon passing the “Tight” PSD hadron requirements. No π^0 peak is observed in the bottom panel as the tight selection produces a pure sample of hadronic showers that cannot be used to reconstruct true π^0 candidates.