

Signal efficiency (ϵ_{sig})1.0
0.8
0.6
0.4
0.2
0.0SVJ ℓ modelMultilepton category, $|\Delta\eta| < 2.2$ With energy fractions, no k_T pruning— $m_{Z'} = 2 \text{ TeV}$, $r_{\text{inv}} = 0.3$, $m_{\text{dark}} = 16 \text{ GeV}$ (AUC = 0.92)— $m_{Z'} = 3 \text{ TeV}$, $r_{\text{inv}} = 0.3$, $m_{\text{dark}} = 16 \text{ GeV}$ (AUC = 0.94)- - $m_{Z'} = 4 \text{ TeV}$, $r_{\text{inv}} = 0.3$, $m_{\text{dark}} = 16 \text{ GeV}$ (AUC = 0.95)- - $m_{Z'} = 3 \text{ TeV}$, $r_{\text{inv}} = 0.5$, $m_{\text{dark}} = 16 \text{ GeV}$ (AUC = 0.92)- - $m_{Z'} = 3 \text{ TeV}$, $r_{\text{inv}} = 0.3$, $m_{\text{dark}} = 8 \text{ GeV}$ (AUC = 0.93)- - $m_{Z'} = 3 \text{ TeV}$, $r_{\text{inv}} = 0.3$, $m_{\text{dark}} = 32 \text{ GeV}$ (AUC = 0.91)Background efficiency (ϵ_{bkg})1.0
0.8
0.6
0.4
0.2
0.0