## NCpi0BDT\_Np\_bnb\_12\_pi0\_momentum\_all Event counts $\Sigma$ Data/ $\Sigma$ Prediction=0.86±0.29 $\chi^{2}/\text{ndf} = 9.3/25$ Pred. Uncertainty EXT, 264.1 Out FV, 189.4 NC $\pi^{0}$ QE, 11.5 NC $\pi^{0}$ DIS, 220.3 CC $\pi^{0}$ , 495.5 CC Other, 350.0 POT: 6.37e+20 POT: 6.3/e+20BNB Data, 2492.0 Cosmic, 73.0 Dirt, 15.4 NC $\pi^0$ COH, 5.0 NC $\pi^0$ RES, 976.4 NC $\pi^0$ MEC, 0.9 NC Other, 266.9 $v_e/\overline{v}_e$ CC, 14.5 800 600 400 200 1.8 1.6 Data/Prediction **Total Uncertainty** Stat. + Flux + Cross Sec. + Reweight 1.4 1.2 0.8 0.6 0.4 0.2 0 1200 1400 $\pi^0$ Momentum [MeV/c] 200 400 600 1000 800