Profile Likelihood Distributions for Mass Bin 120 GeV 2.00 -Background only Signal + Background 1.75 -Observed Profile Likelihood p=0.05 threshold value, with power = 0.74 1.50 -1.25 -Density 1.00 -0.75 -0.50 -0.25 0.00 15.0 7.5 10.0 12.5 17.5 2.5 5.0 20.0 0.0 Profile Likelihood