Correlated LHCO Example Median and Min/Max of 10 models Data vs. Sim Optimal CWoLa 10^{4} 10^{4} Rejection (1/False Positive Rate) Rejection (1/False Positive Rate) Supervised Supervised Data vs. Sim Optimal CWoLa Random Random 10³ 10^3 10² 10² 10^{1} 10^{1} 10^{0} 0.0 0.2 0.8 0.0 0.2 0.6 8.0 0.4 0.6 1.0 1.0 Signal Efficiency (True Positive Rate) Signal Efficiency (True Positive Rate) **CWoLa SALAD** 10^{4} 10^{4} Rejection (1/False Positive Rate) Rejection (1/False Positive Rate) Supervised Supervised **CWoLa SALAD** Random Random 10³ 10³ 10² 10² 10^{1} 10^{1} 0.0 0.0 0.6 0.8 0.2 8.0 0.2 0.4 0.4 0.6 1.0 1.0 Signal Efficiency (True Positive Rate) Signal Efficiency (True Positive Rate) SA-CWoLa, $\lambda = 0.5$ k-SA-CWoLa, $\lambda = 0.995$ 10^{4} 10^{4} Positive Rate) Positive Rate) Supervised Supervised SA-CWoLa, $\lambda = 0.5$ k-SA-CWoLa, $\lambda = 0.995$ Random Random 10³ 10³ Rejection (1/False Rejection (1/False 10² 10² 10^{1} 10^{1} 10⁰ 10⁰ 0.0 0.0 0.2 8.0 0.2 0.4 1.0 1.0 0.6 0.8 0.4 0.6 Signal Efficiency (True Positive Rate) Signal Efficiency (True Positive Rate)