Significance on 2 Higgs Doublet Model ee channel, trained network on full 2HDM + a dataset

Legend:
- $(m_a, m_H, \tan\beta) = (600, 450, 20)$
- $(m_a, m_H, \tan\beta) = (1200, 200, 1)$
- $(m_a, m_H, \tan\beta) = (600, 250, 30)$
- $(m_a, m_H, \tan\beta) = (1000, 300, 1)$
- $(m_a, m_H, \tan\beta) = (1250, 250, 10)$
- $(m_a, m_H, \tan\beta) = (1800, 100, 1)$
- $(m_a, m_H, \tan\beta) = (1000, 350, 1)$
- $(m_a, m_H, \tan\beta) = (600, 250, 20)$
- $(m_a, m_H, \tan\beta) = (1300, 700, 1)$
- $(m_a, m_H, \tan\beta) = (800, 150, 20)$

X-axis: XGBoost output

Y-axis: Expected significance [σ]