## Plot Attributes SO11HosotaniDummyCase

## July 7, 2020

Statistics for SO11HosotaniDummyCase attributes. We are imposing a ChiSquared cut at a upper bound of :20.52 The following are the attributes that go into the making of the plot k-zL-ThetaHiggs:

The following have a contribution to  $\chi^2_G$  corresponding to:

 $m_H(\text{GeV})$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_H(\text{GeV})$  Test Mean: 125.18
- $m_H(\text{GeV})$  Expedimental Standard deviation : 0.16
- $m_H(\text{GeV})$  Theoretical Standard deviation : 1.25

 $m_{\tau}(\text{GeV})$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_{\tau}(\text{GeV})$  Test Mean : 1.776
- $m_{\tau}(\text{GeV})$  Expedimental Standard deviation : 0.00012
- $m_{\tau}(\text{GeV})$  Theoretical Standard deviation : 0.01776

 $m_{\nu}(eV)$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_{\nu}(eV)$  Test Mean: 0.1
- $m_{\nu}(eV)$  Expedimental Standard deviation : 0.0
- $m_{\nu}(eV)$  Theoretical Standard deviation : 1.0

 $m_b(\text{GeV})$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_b(\text{GeV})$  Test Mean: 4.18
- $m_b(\text{GeV})$  Expedimental Standard deviation: 0.04
- $m_b(\text{GeV})$  Theoretical Standard deviation : 0.0418

 $m_t(\text{GeV})$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_t(\text{GeV})$  Test Mean: 172.44
- $m_t(\text{GeV})$  Expedimental Standard deviation : 0.9
- $m_t(\text{GeV})$  Theoretical Standard deviation: 1.724

 $m_{W^{\pm}}(\text{GeV})$  with test mean, experimental StdDev, and theoretical StdDev:

- $m_{W^{\pm}}(\text{GeV})$  Test Mean : 80.379
- $m_{W^{\pm}}(\text{GeV})$  Expedimental Standard deviation : 0.012
- $m_{W^{\pm}}(\text{GeV})$  Theoretical Standard deviation : 0.8037

The following have a hard cut corresponding to:

 $m_{\psi_D}(\text{GeV})$  with a cut type and value

- $m_{\psi_D}(\text{GeV})$  Cut Type :HardCutMore
- $m_{\psi_D}(\text{GeV})$  Cut Value : 690

 $m_{\tau}^{(1)}({\rm GeV})$  with a cut type and value

- $m_{\tau}^{(1)}(\text{GeV})$  Cut Type :HardCutMore
- $m_{\tau}^{(1)}(\text{GeV})$  Cut Value : 560

 $m_b^{(1)}(\text{GeV})$  with a cut type and value

- $m_b^{(1)}({\rm GeV})$  Cut Type :HardCutMore
- $m_h^{(1)}(\text{GeV})$  Cut Value : 690

 $m_{Z'}(\text{GeV})$  with a cut type and value

- $m_{Z'}(\text{GeV})$  Cut Type :HardCutMore
- $m_{Z'}(\text{GeV})$  Cut Value : 2420