

m_H (GeV/c²)

 $m_{_{\rm H}} \, ({\rm GeV/c^2})$

- Mis-calibration and mis-alignment (with the tracker 100 pb⁻¹ misalignment scenario \rightarrow in the 4 μ channel M₄₁ increase of 2%
- Data-driven methods to measure backgrounds from data; Zbb; sidebands method (35%), ZZ ; normalization to single Z (8%)

- H-WW-22 300 400 500 600 M_H,GeV/c²

(5σ significance) at CMS combining HZZ and HWW channels