

35.9 fb⁻¹ (13 TeV)

CMS *Preliminary*

2HDM+a, $h \rightarrow b\bar{b}$

$\tan \beta = 1.0$, $m_\chi = 10$ GeV, $m_A = m_H = m_{H^\pm}$

solid (dashed) lines: observed (expected) limit

unc. band: ± 1 std. dev. on exp. limit

95% C.L. asymptotic limit on $\mu = \sigma / \sigma_{\text{theory}}$

100

10

1

0.1

0.1

0.2

0.3

0.4

0.5

0.6

0.7

0.8

0.9

$\pm 20\%$ theory uncertainty

 $m_a = 200$ GeV, $m_A = 600$ GeV

 $m_a = 350$ GeV, $m_A = 1000$ GeV

$\sin \theta$

