

35.9 fb<sup>-1</sup> (13 TeV)

**CMS**

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:  $\pm 1$  std. dev. on exp. limit

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

$\pm 20\%$  theory uncertainty

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

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

0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9

$\sin \theta$

100

10

1

0.1