

19.7 fb⁻¹ (8 TeV)

tan β

CMS

$pp \rightarrow \bar{t}(b)H^+$

$H^+ \rightarrow \tau^+ \nu_\tau$ final states:

$\tau_h + \text{jets}$

$H^+ \rightarrow \bar{t}b$ final states:

$l + \text{jets}, \mu\tau, //$

MSSM updated m_h^{max}

—■— Observed

— Excluded

— Expected median $\pm 1\sigma$

— Expected median $\pm 2\sigma$

— $m_h^{\text{MSSM}} = 125 \text{ GeV}$

— $m_h^{\text{MSSM}} \neq 125 \pm 3 \text{ GeV}$

10

200

250

300

350

400

450

500

550

600

$m_{H^+} [\text{GeV}]$

