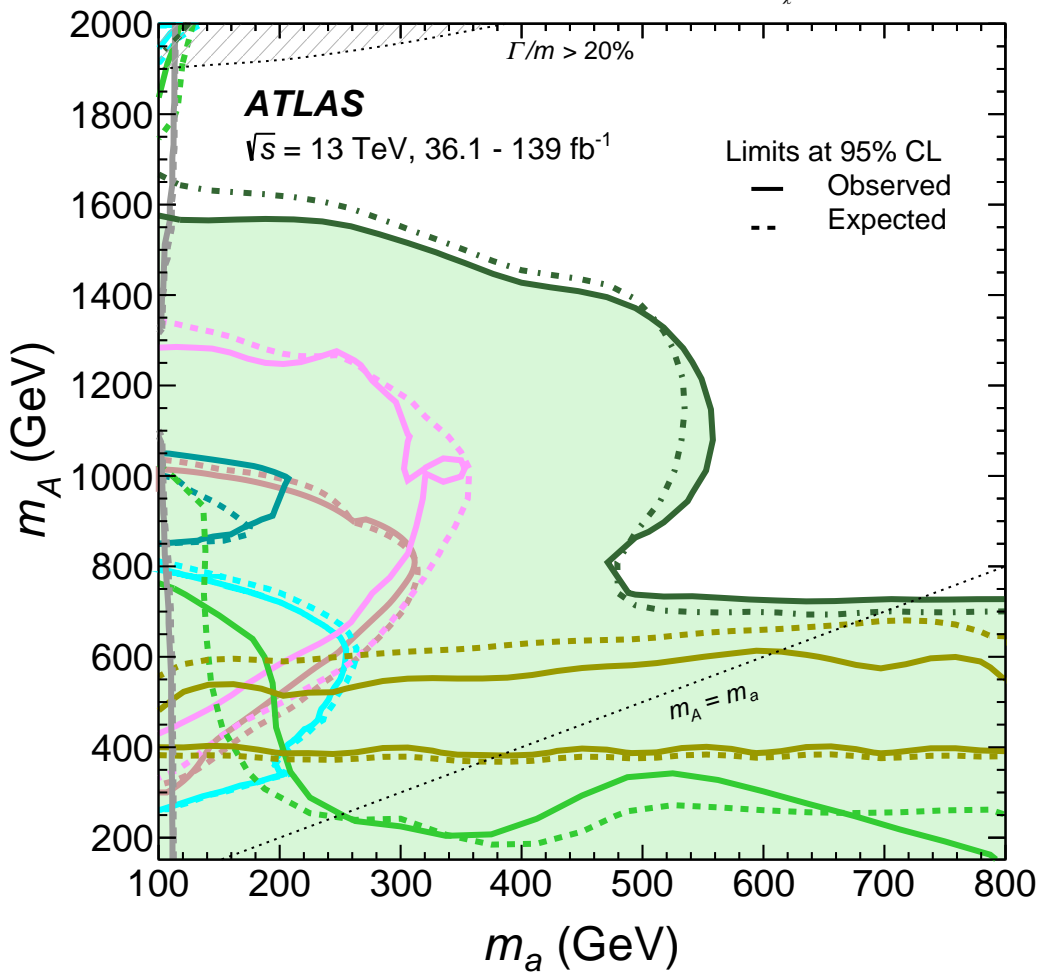


2HDM+a, Dirac DM,  $\sin \theta = 0.35$ ,  $\tan \beta = 1$ ,  $m_\chi = 10$  GeV,  $g_\chi = 1$ ,  $m_A = m_H = m_{H^\pm}$



- $E_T^{\text{miss}} + h(\tau\tau)$ , 139 fb $^{-1}$   
arXiv:2305.12938
- $E_T^{\text{miss}} + h(\gamma\gamma)$ , 139 fb $^{-1}$   
JHEP 10 (2021) 13
- $E_T^{\text{miss}} + Z(q\bar{q})$ , 36.1 fb $^{-1}$   
JHEP 10 (2018) 180
- $E_T^{\text{miss}} + tW$ , 139 fb $^{-1}$   
arXiv:2211.13138
- $E_T^{\text{miss}} + j$ , 139 fb $^{-1}$   
PRD 103 (2021) 112006
- $t\bar{t}t\bar{t}$ , 139 fb $^{-1}$   
arXiv:2211.01136
- $h \rightarrow \text{invisible}$ , 139 fb $^{-1}$   
arxiv:2301.10731
- **Combination**  
 $E_T^{\text{miss}} + h(b\bar{b})$ ,  $E_T^{\text{miss}} + Z(l\bar{l})$ ,  $tbH^\pm(tb)$