

Summary plots 1

February 21, 2022

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Plots with constraints

- Small regions (following previous paper) around

$$\delta a_\mu = (2.5 \pm 0.6) \times 10^{-9}, \quad \delta a_e = (-8.7 \pm 3.6) \times 10^{-13},$$

- two different perturbativity requirements (dark and light blue regions, respectively)

$$|\text{Re}(n_\ell)| < 100 \text{ GeV} \text{ or } |\text{Re}(n_\ell)| < 250 \text{ GeV}.$$

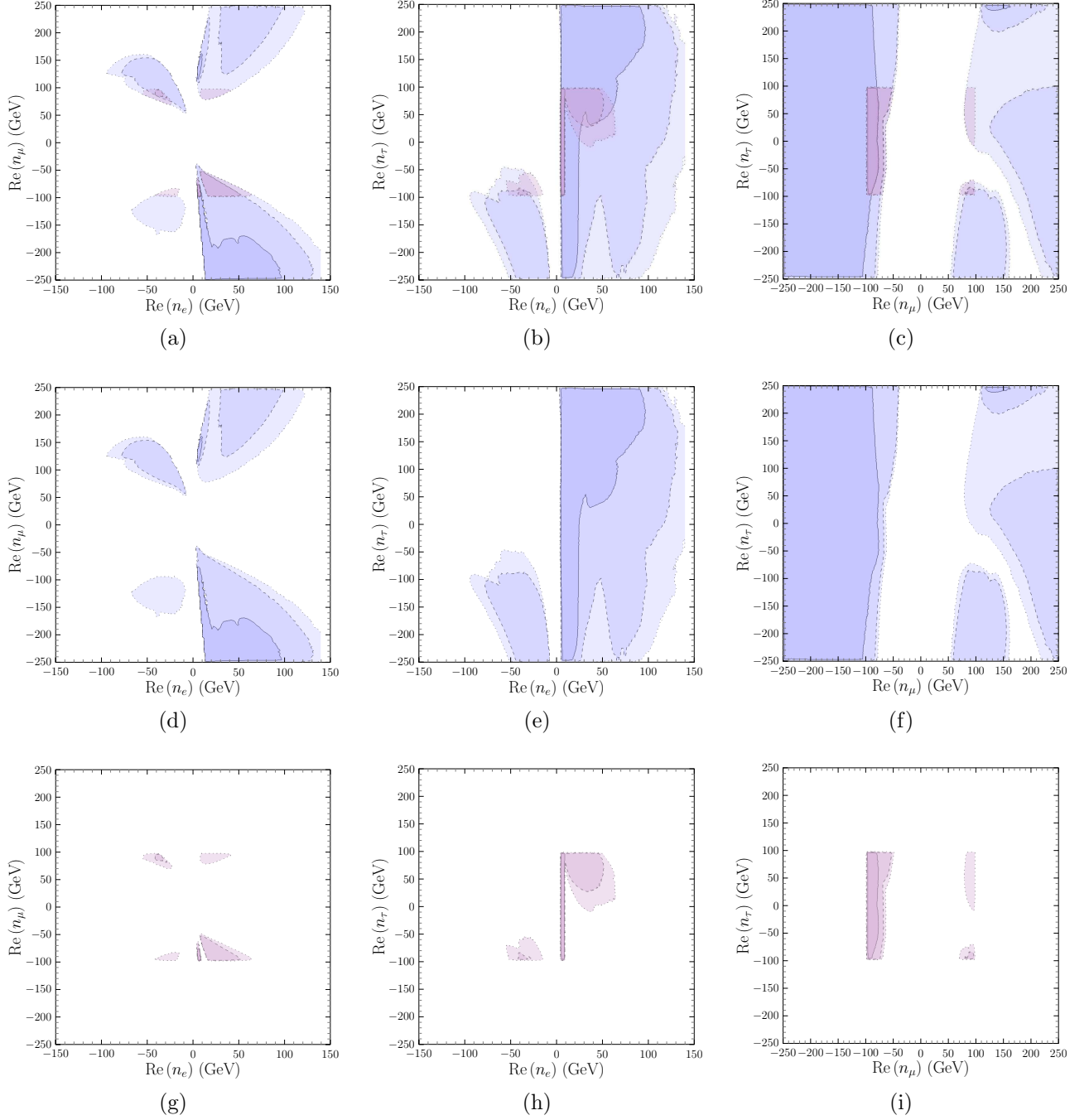


Figure 1: $\text{Re}(n_\ell)$

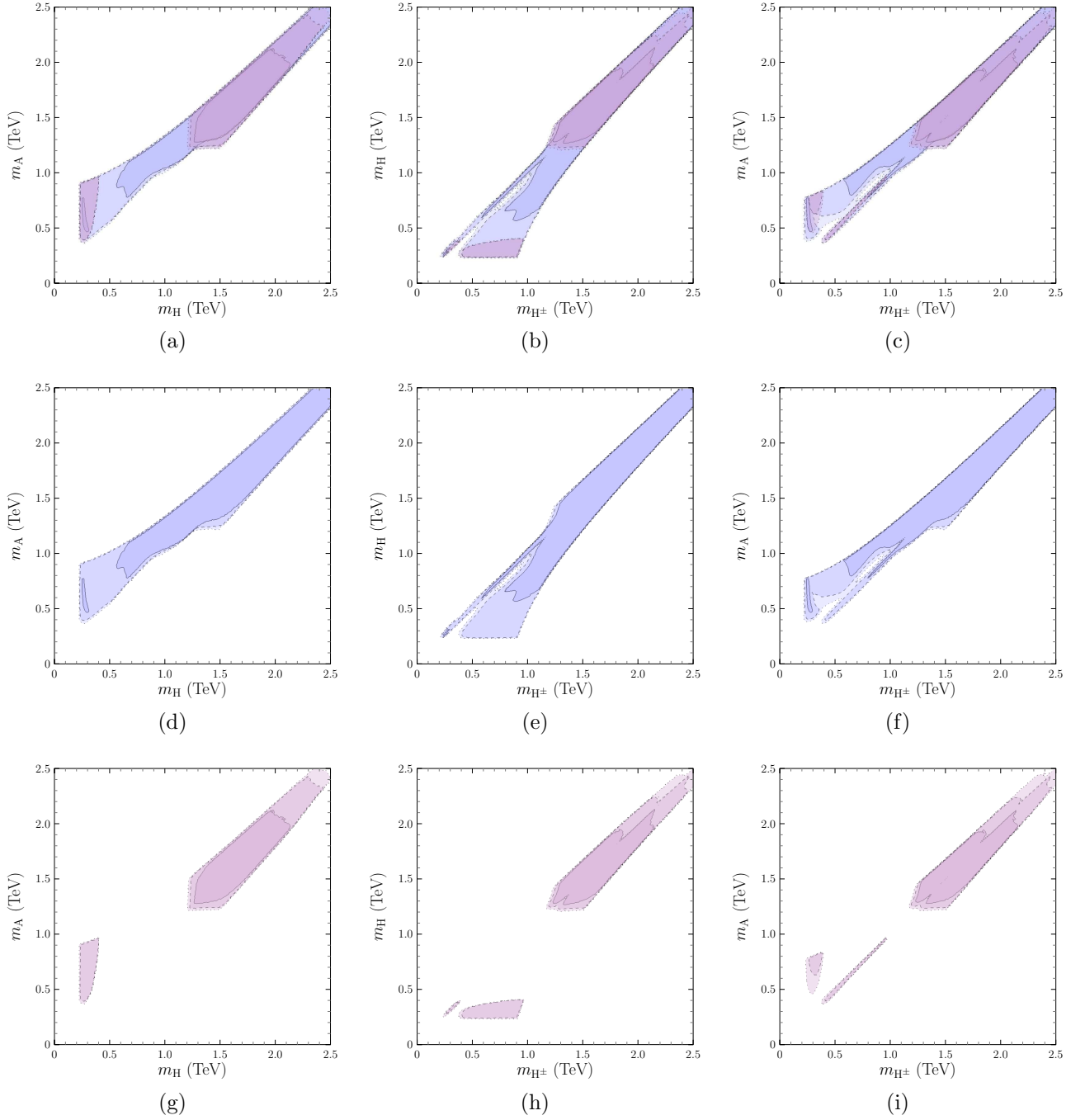
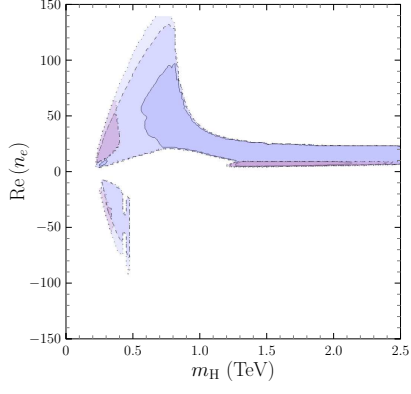
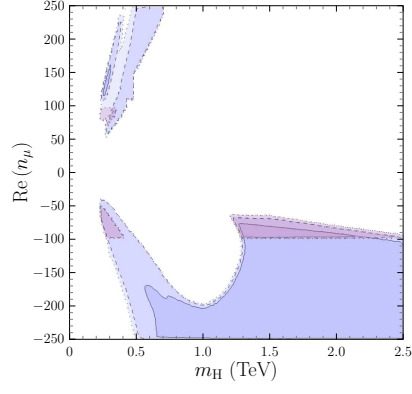


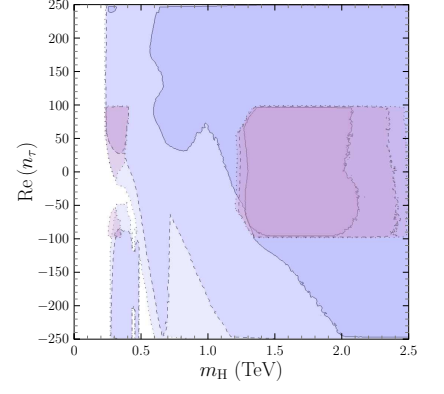
Figure 2: Scalar masses



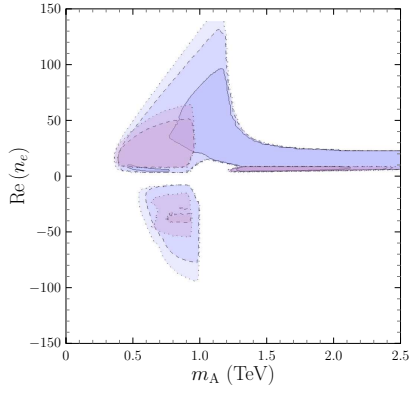
(a)



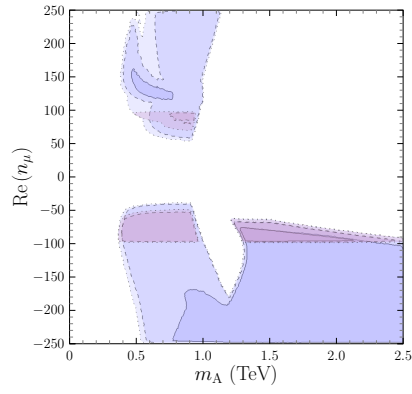
(b)



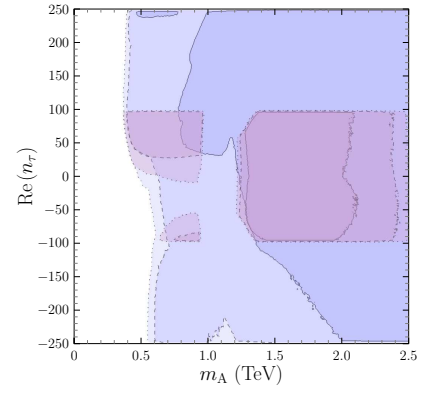
(c)



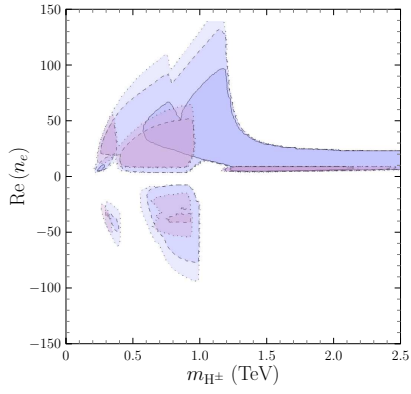
(d)



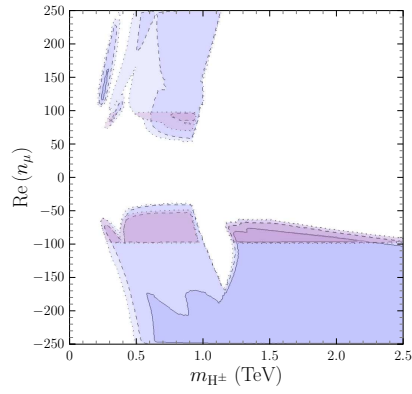
(e)



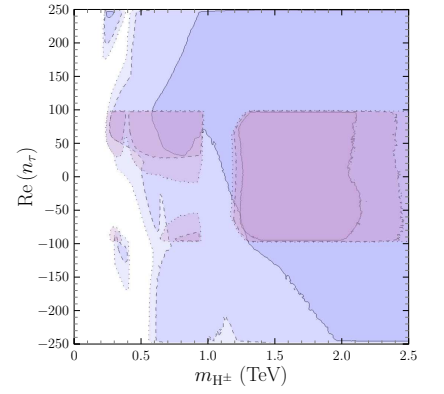
(f)



(g)



(h)



(i)

Figure 3: $\text{Re}(n_\ell)$ vs Masses

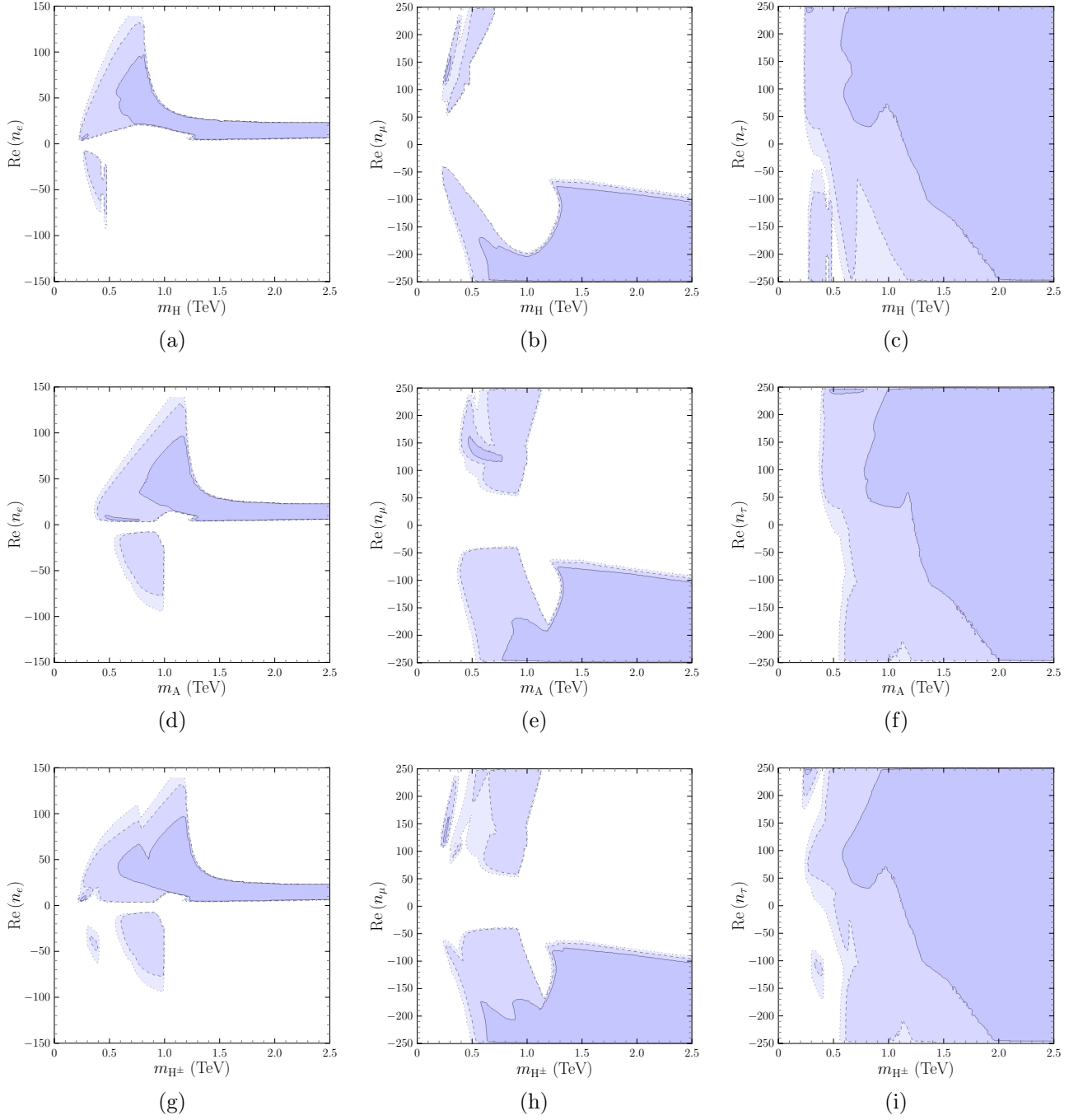
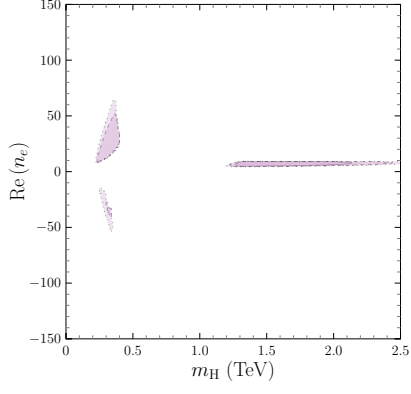
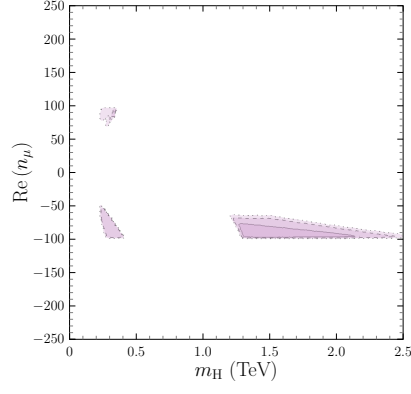


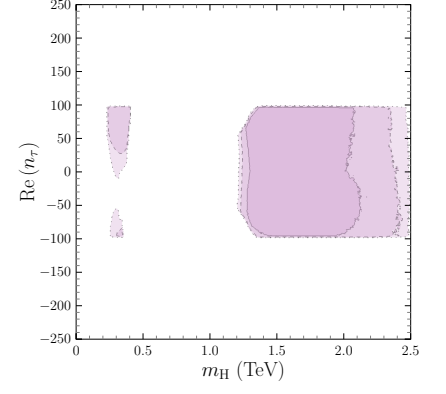
Figure 4: $\text{Re}(n_\ell)$ vs Masses



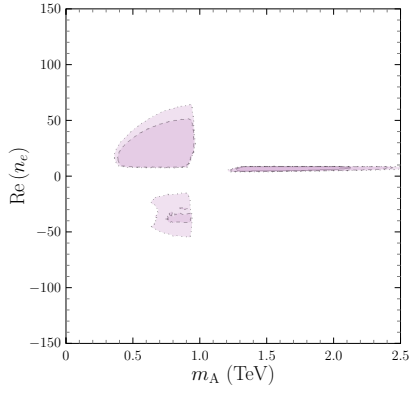
(a)



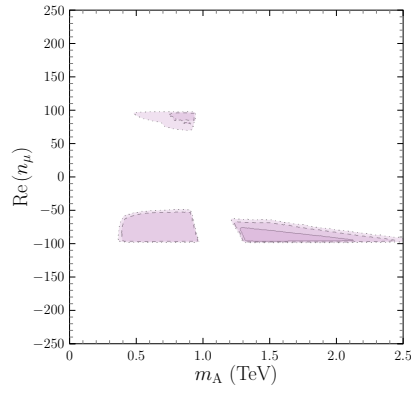
(b)



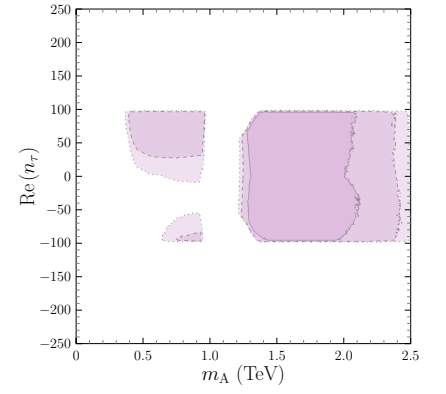
(c)



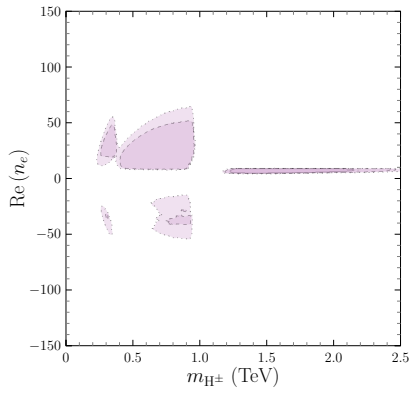
(d)



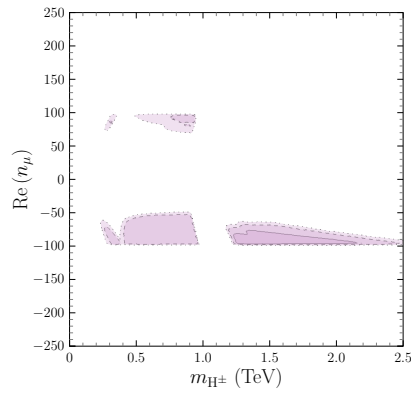
(e)



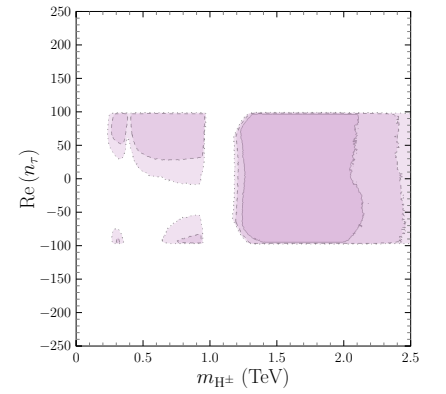
(f)



(g)



(h)



(i)

Figure 5: $\text{Re}(n_\ell)$ vs Masses

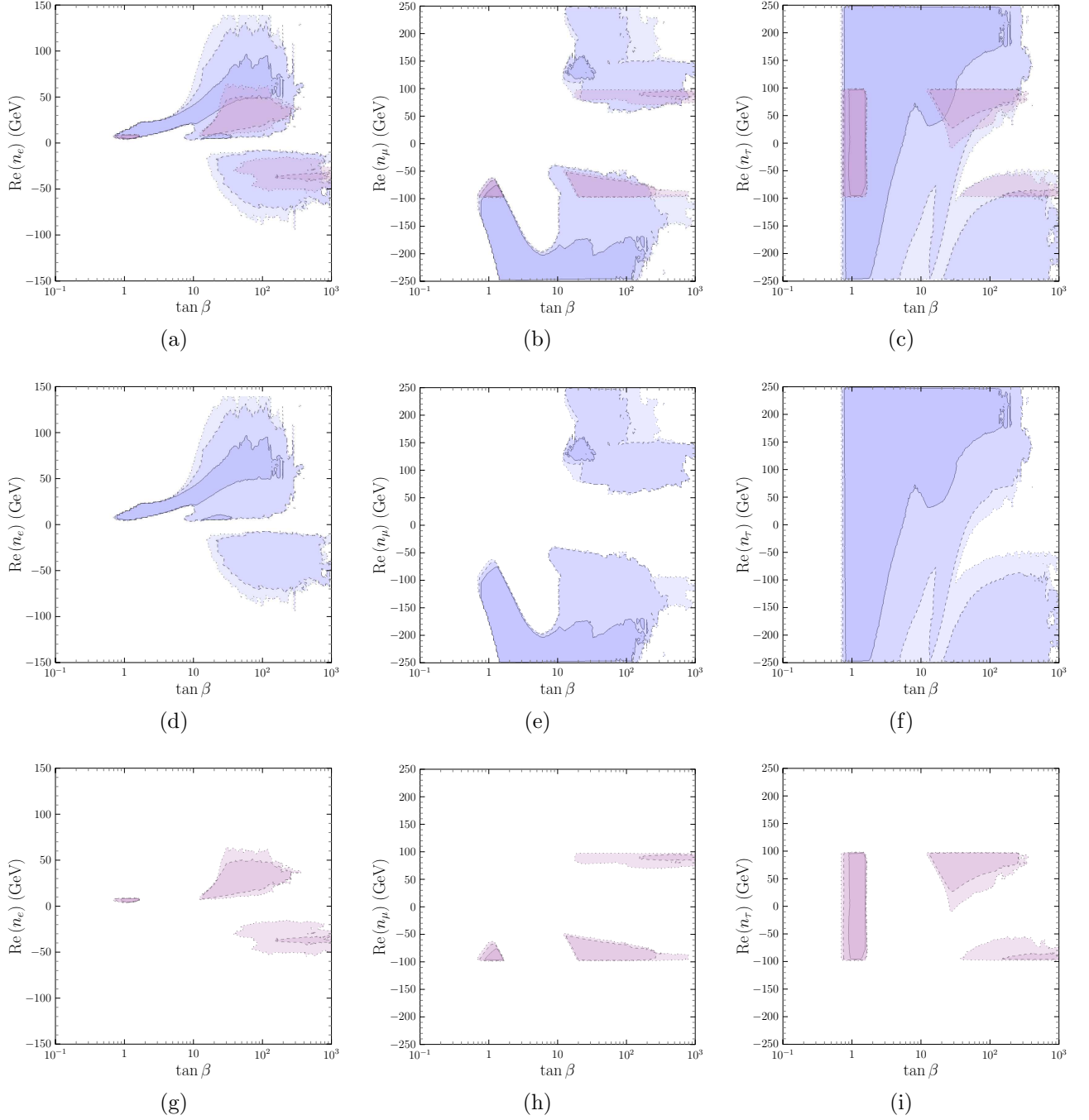


Figure 6: $\text{Re}(n_\ell)$ vs. $\tan\beta$

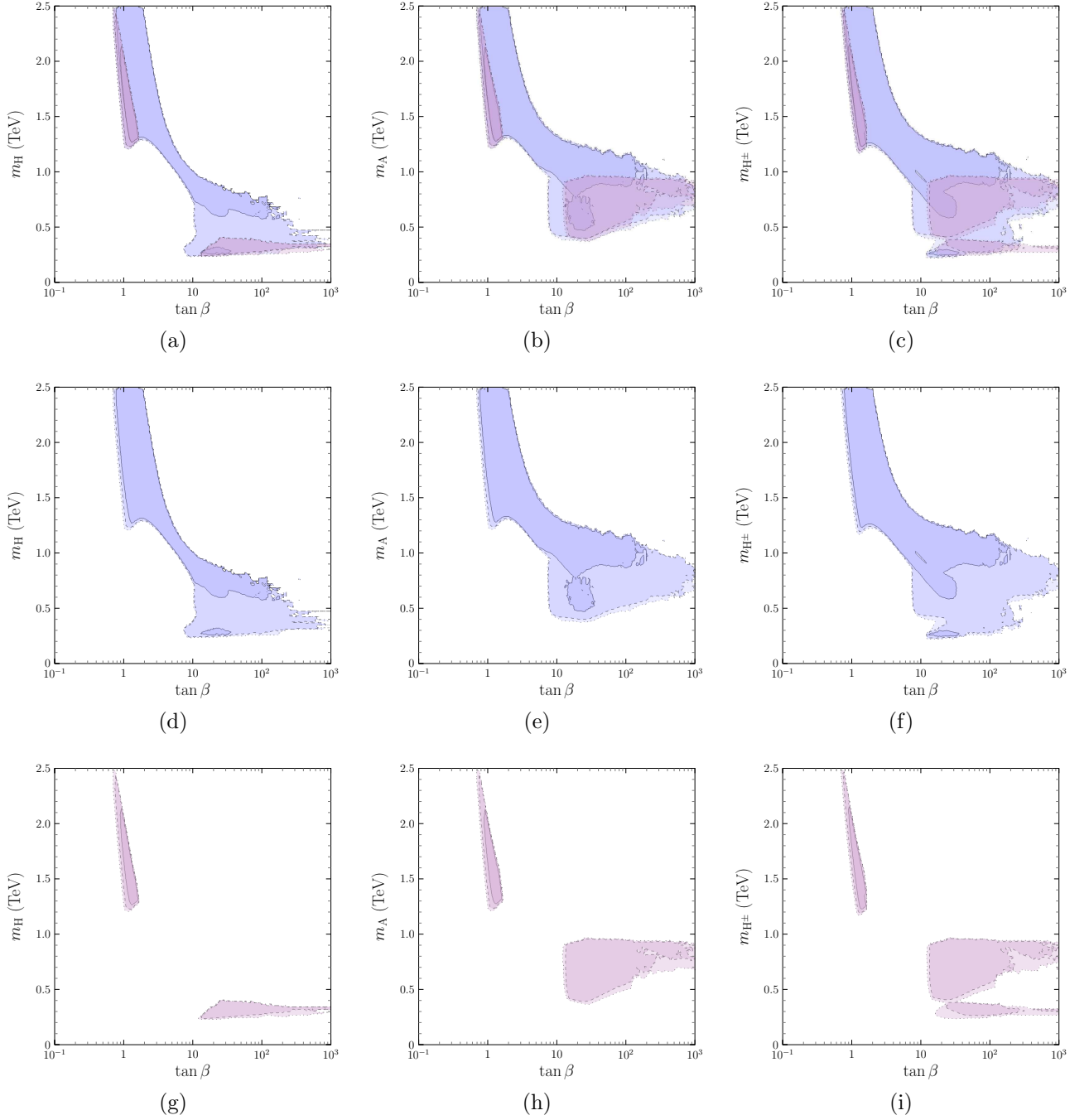


Figure 7: Masses vs. $\tan \beta$

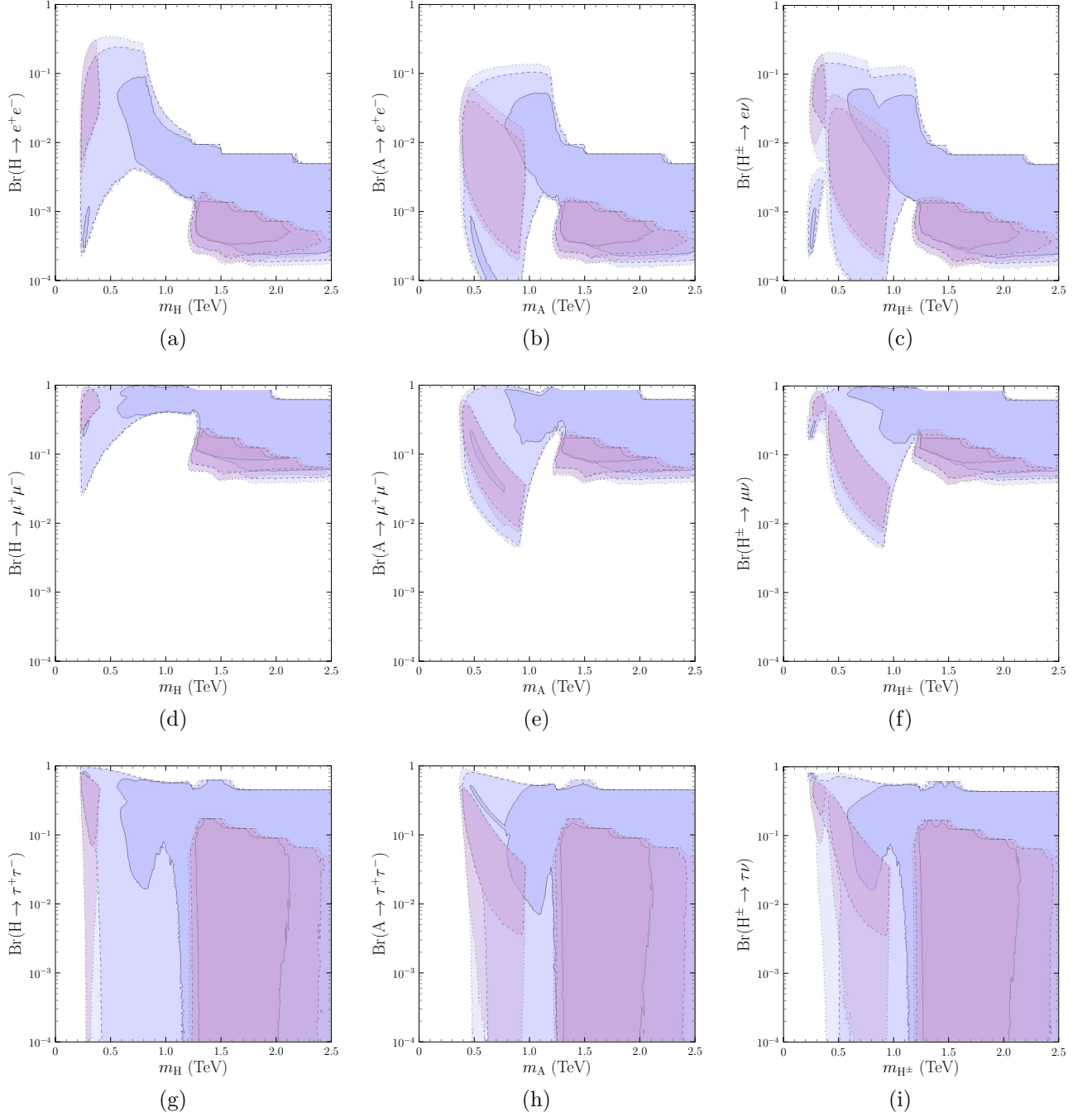


Figure 8: BR's of scalars (1)

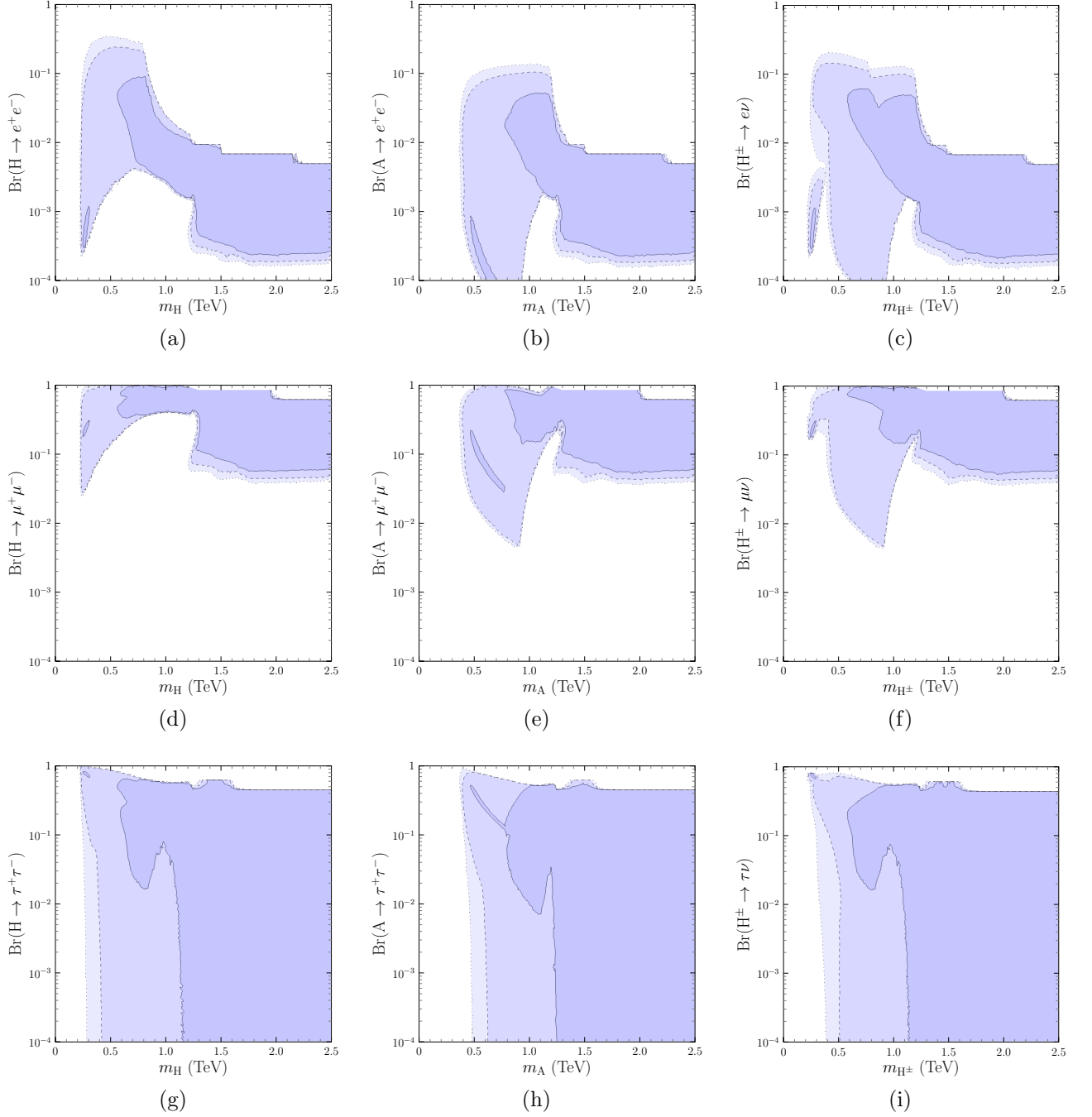


Figure 9: BR's of scalars (1)

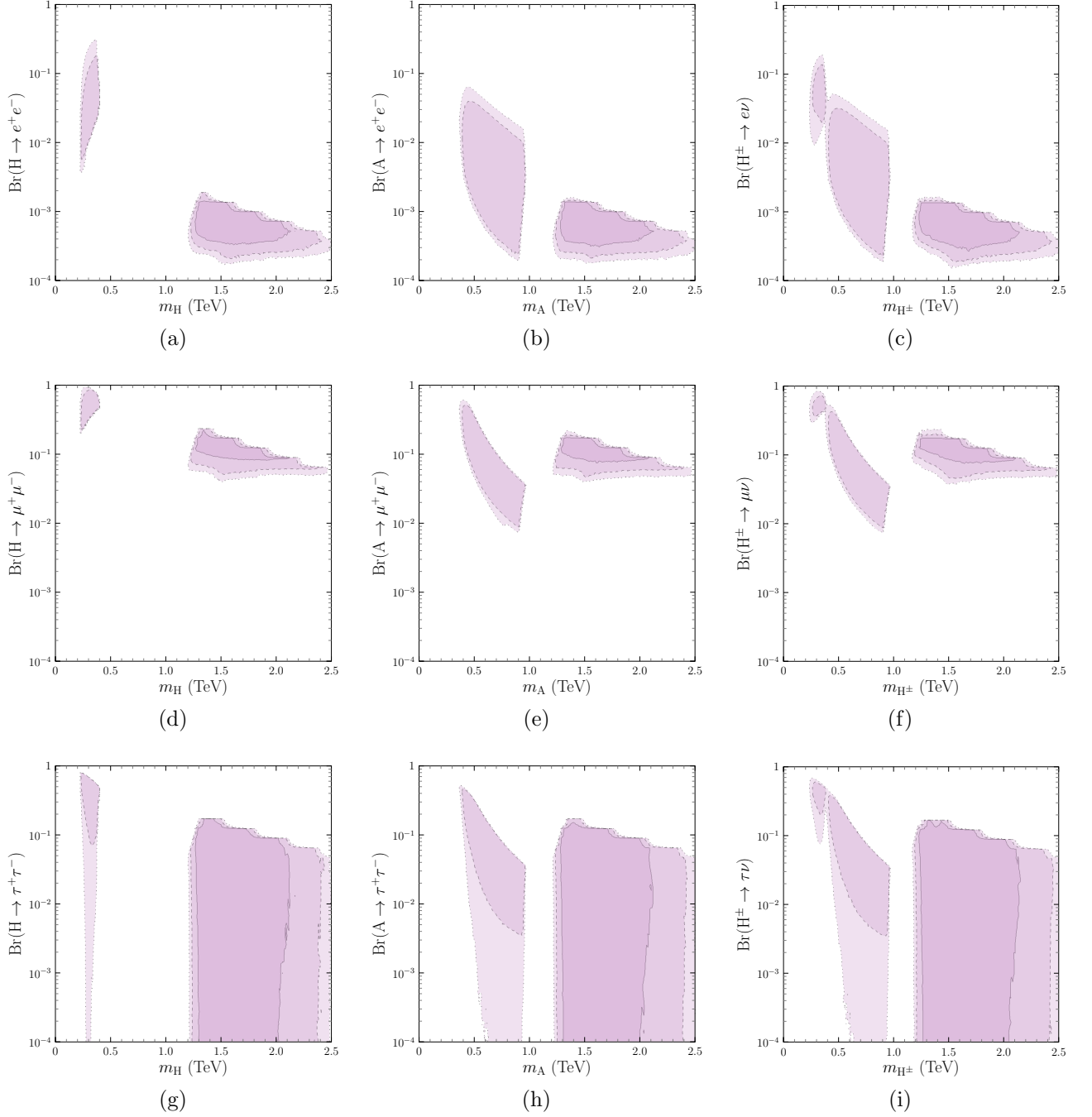


Figure 10: BR's of scalars (1)

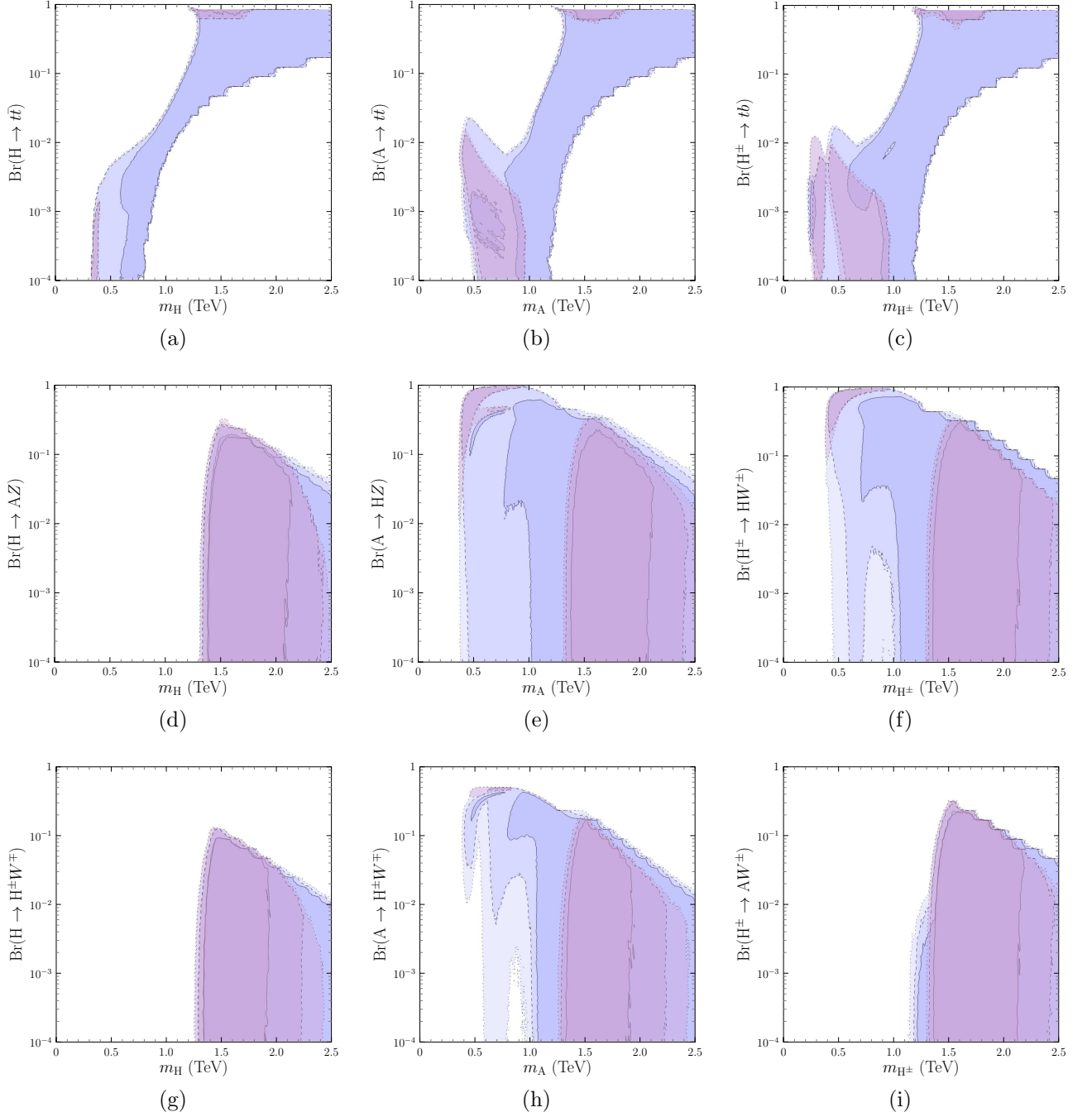


Figure 11: BR's of scalars (2)

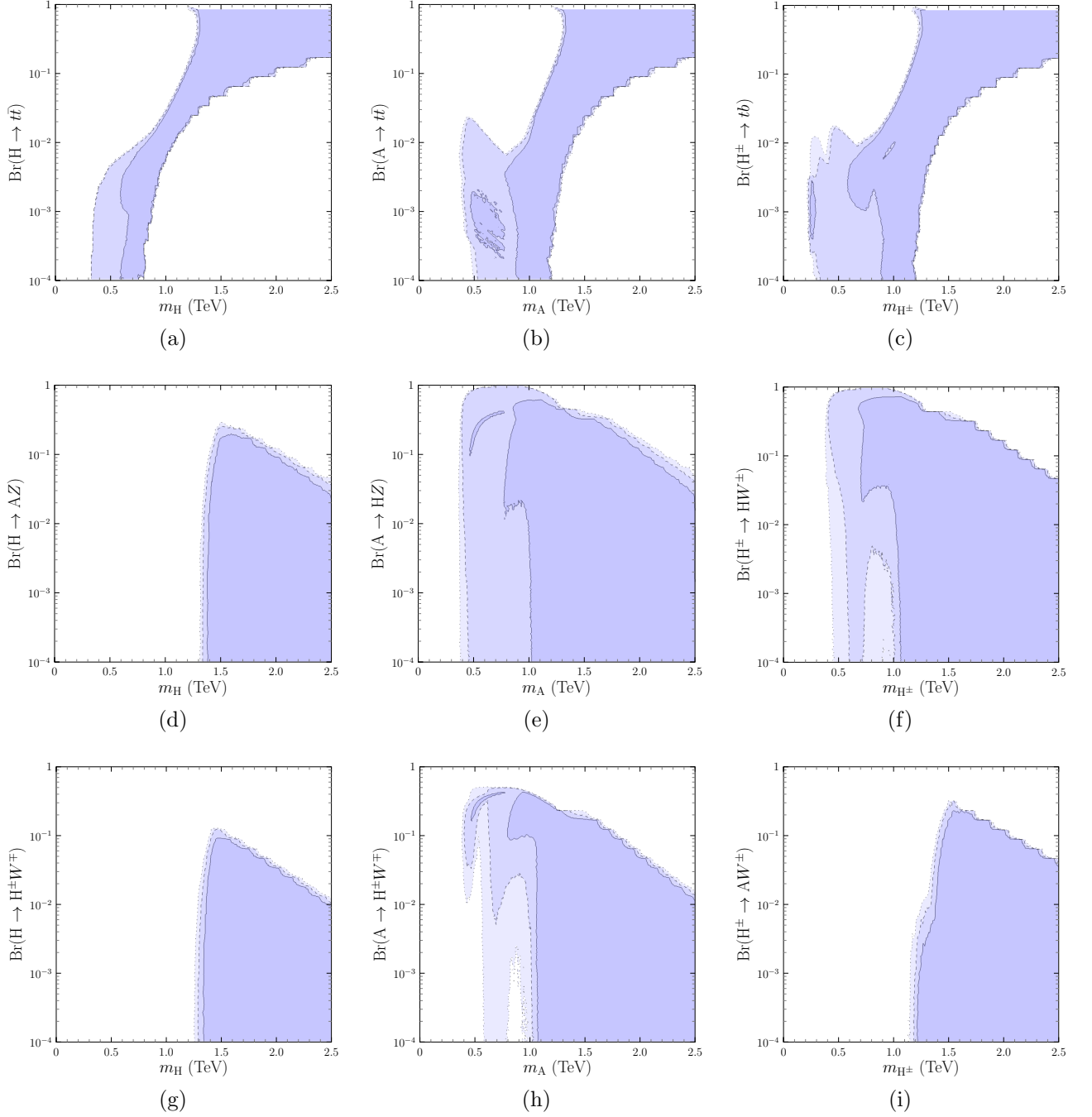


Figure 12: BR's of scalars (2)

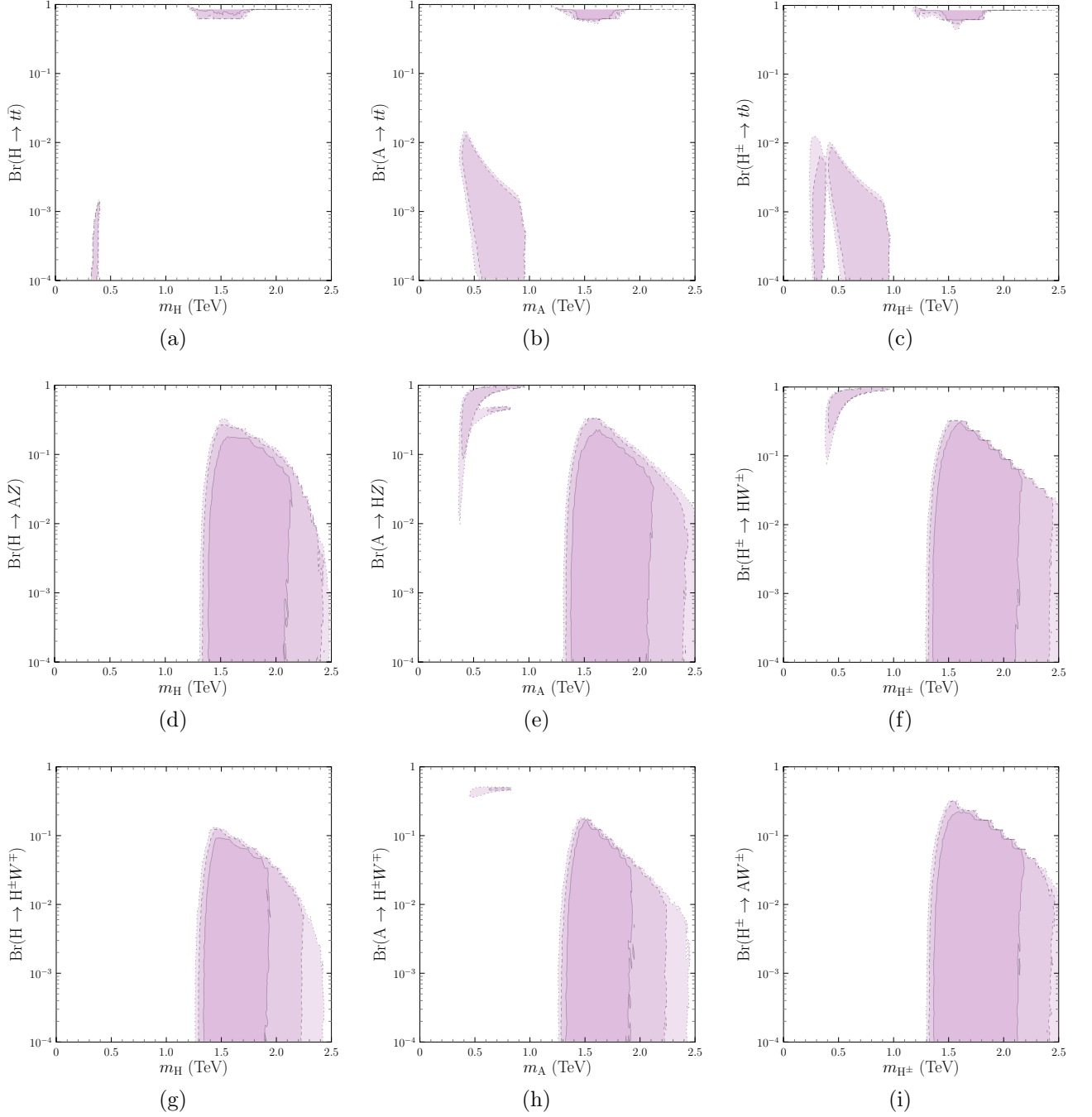


Figure 13: BR's of scalars (2)

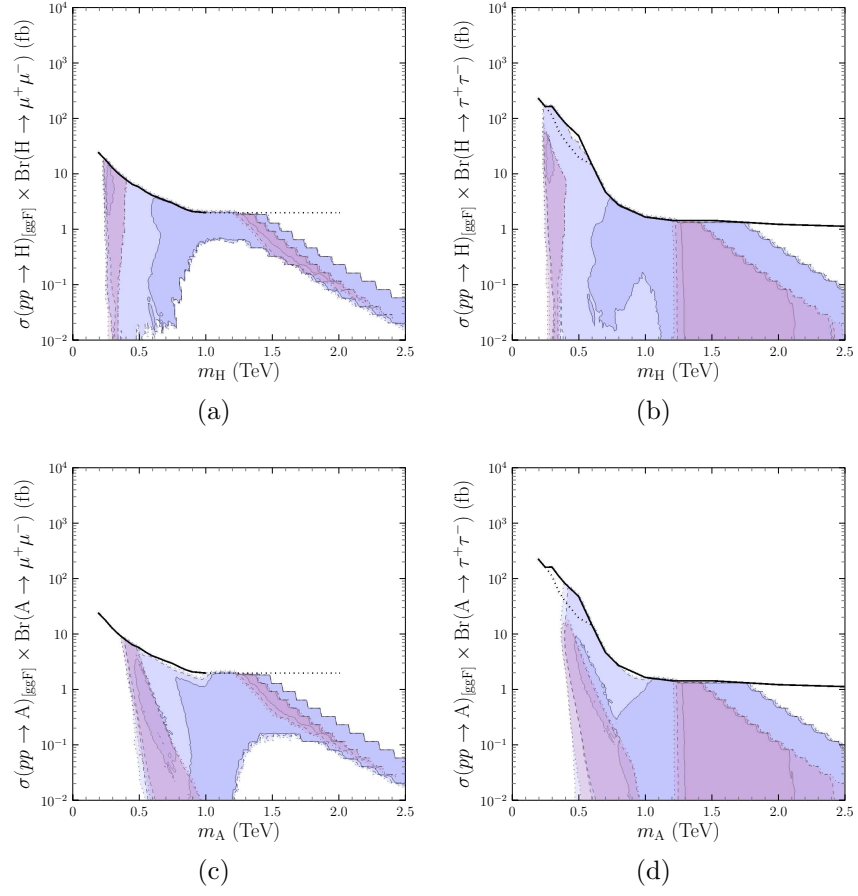


Figure 14: $[pp]_{\text{ggF}} \rightarrow S \rightarrow \ell^+ \ell^-$

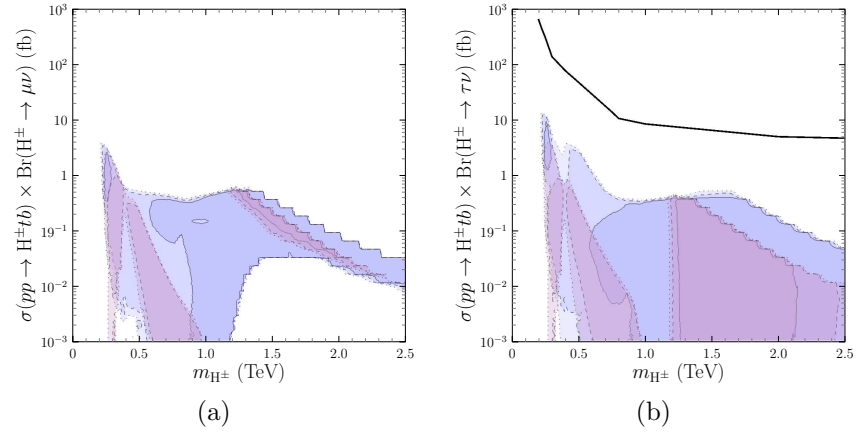


Figure 15: $[pp] \rightarrow H^\pm(tb) \rightarrow \ell \nu$

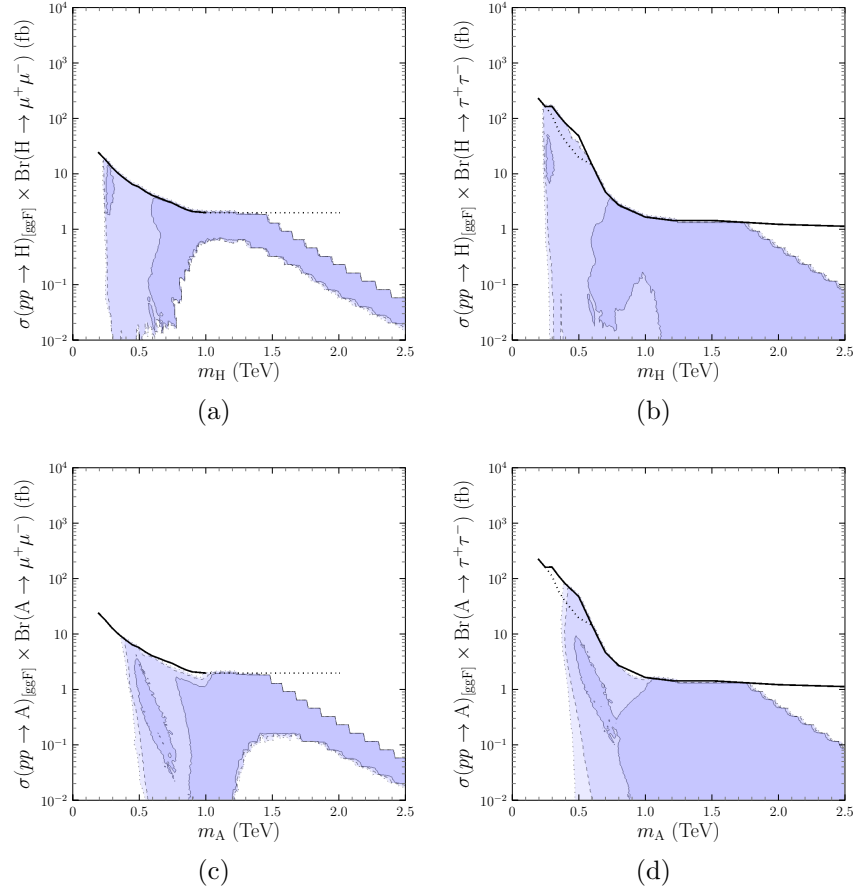


Figure 16: $[pp]_{\text{ggF}} \rightarrow S \rightarrow \ell^+ \ell^-$

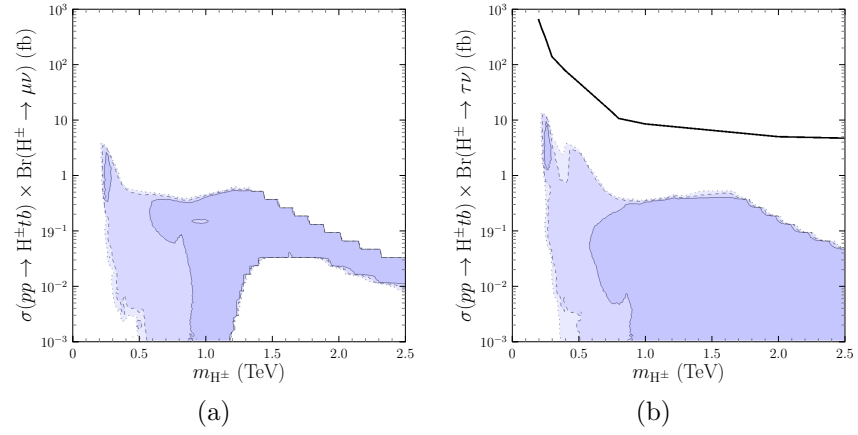


Figure 17: $[pp] \rightarrow H^\pm(tb) \rightarrow \ell \nu$

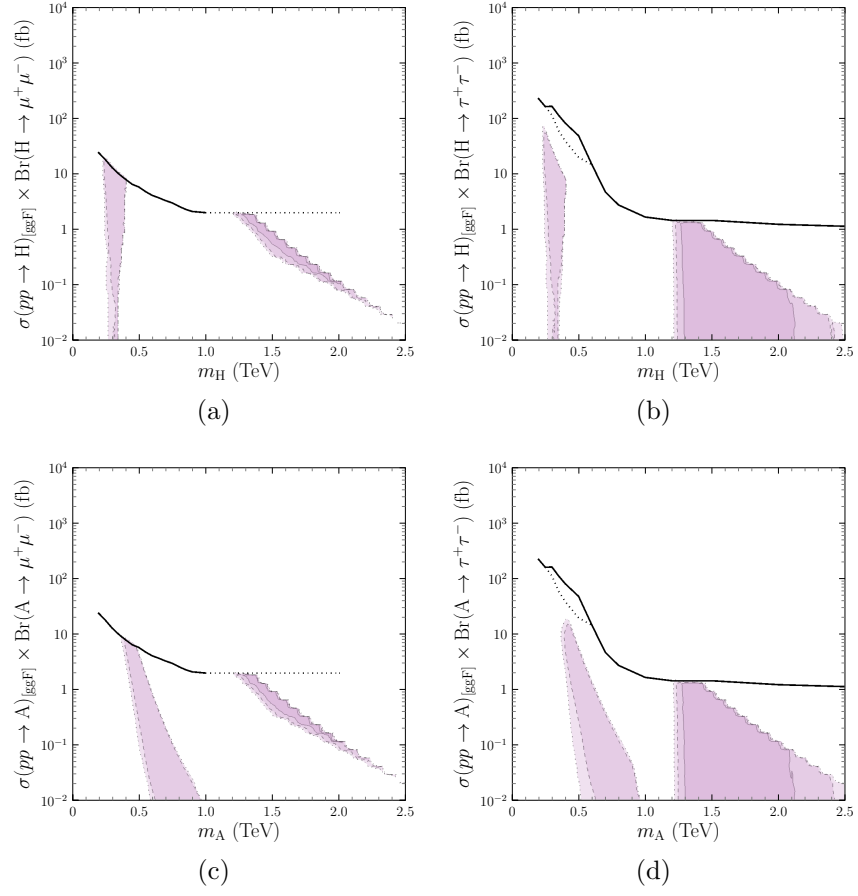


Figure 18: $[pp]_{\text{ggF}} \rightarrow S \rightarrow \ell^+ \ell^-$

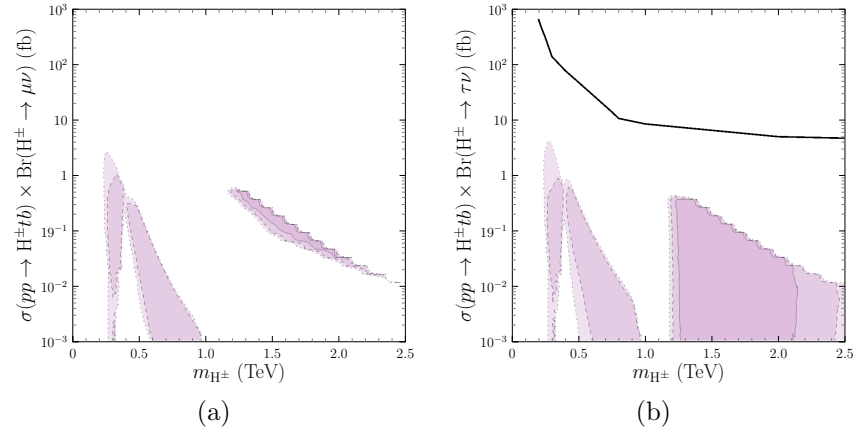


Figure 19: $[pp] \rightarrow H^\pm(tb) \rightarrow \ell \nu$