

MY THESIS PLANS

Supervisor: Heidi Sandaker

- ▶ Study dark matter exclusion possibilities within a SUSY framework.
- ▶ Include updated limits from ATLAS
- ▶ As well as expected exclusion reach of CTA

What I have done so far

- ▶ I have started familiarizing myself with DarkSusy and ISAJET
- ▶ Adapted the sample program and some auxiliaries to run over *s/ha*-files from ISAJET
- ▶ I am currently exploring slices at different $\tan(\beta)$ (10, 30, 45) from the initial plots, seeing if they resemble the ones that I see in the literature.

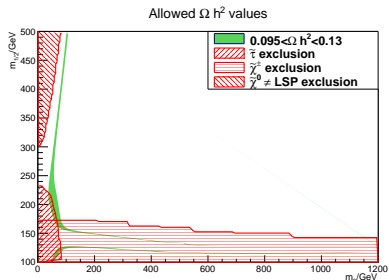


Figure: A slice of mSUGRA @ $A_0 = 0$, $\tan(\beta) = 3$, $\mu > 0$

More figures- $\tan(\beta) = 45, m_t = 127.7$

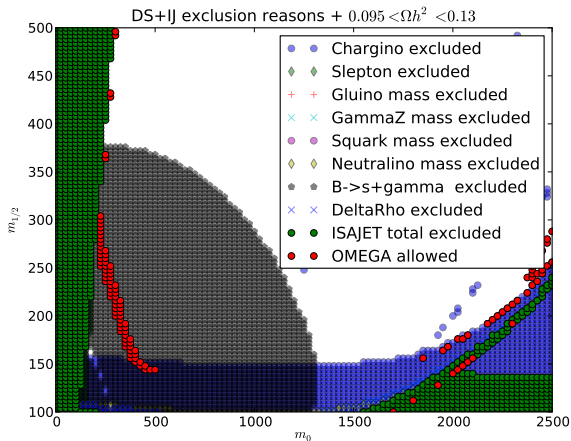


Figure: Rough plot; $\tan(\beta) = 45, A_0 = 0, \mu > 0, m_t = 172.7$