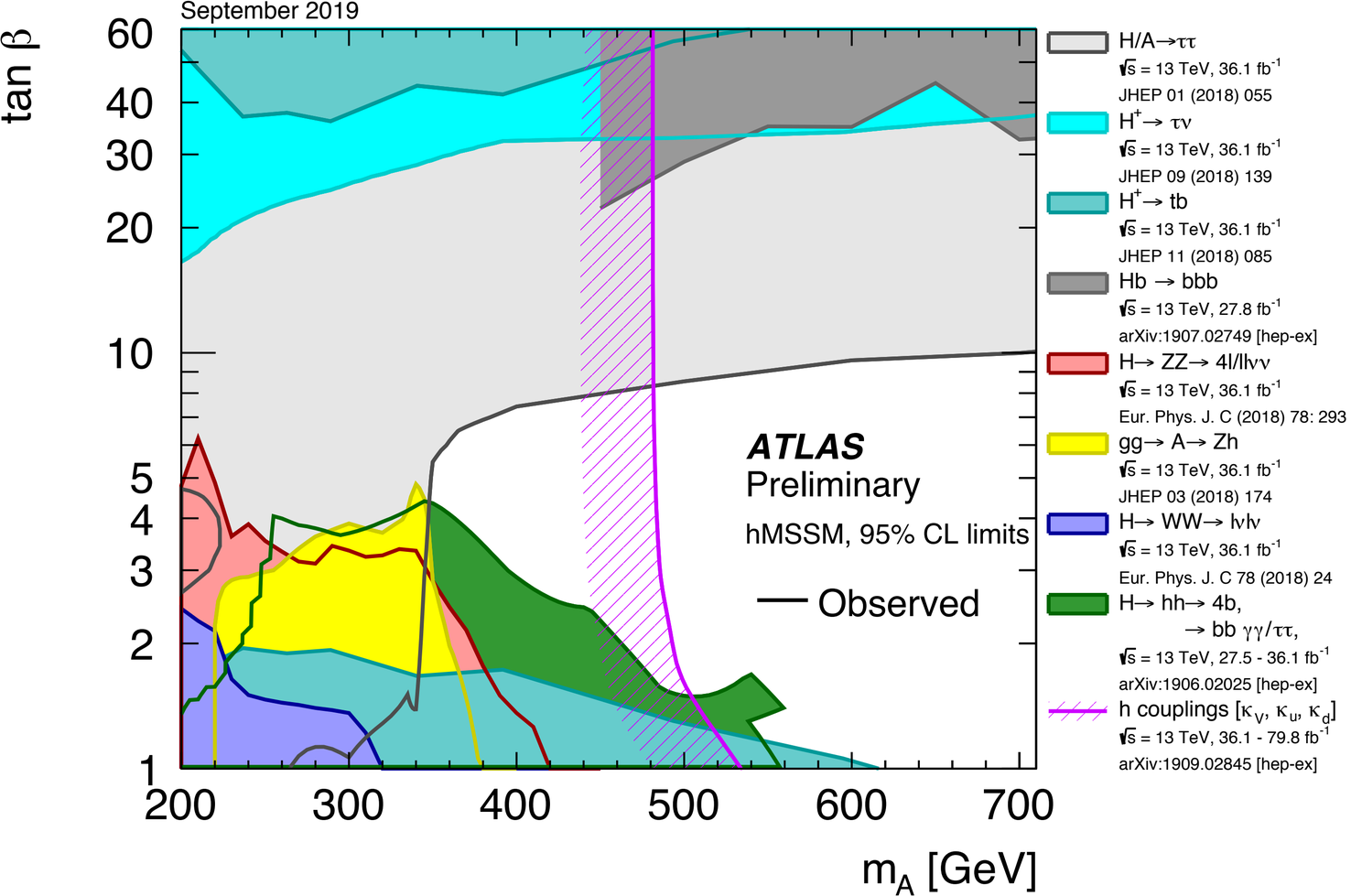
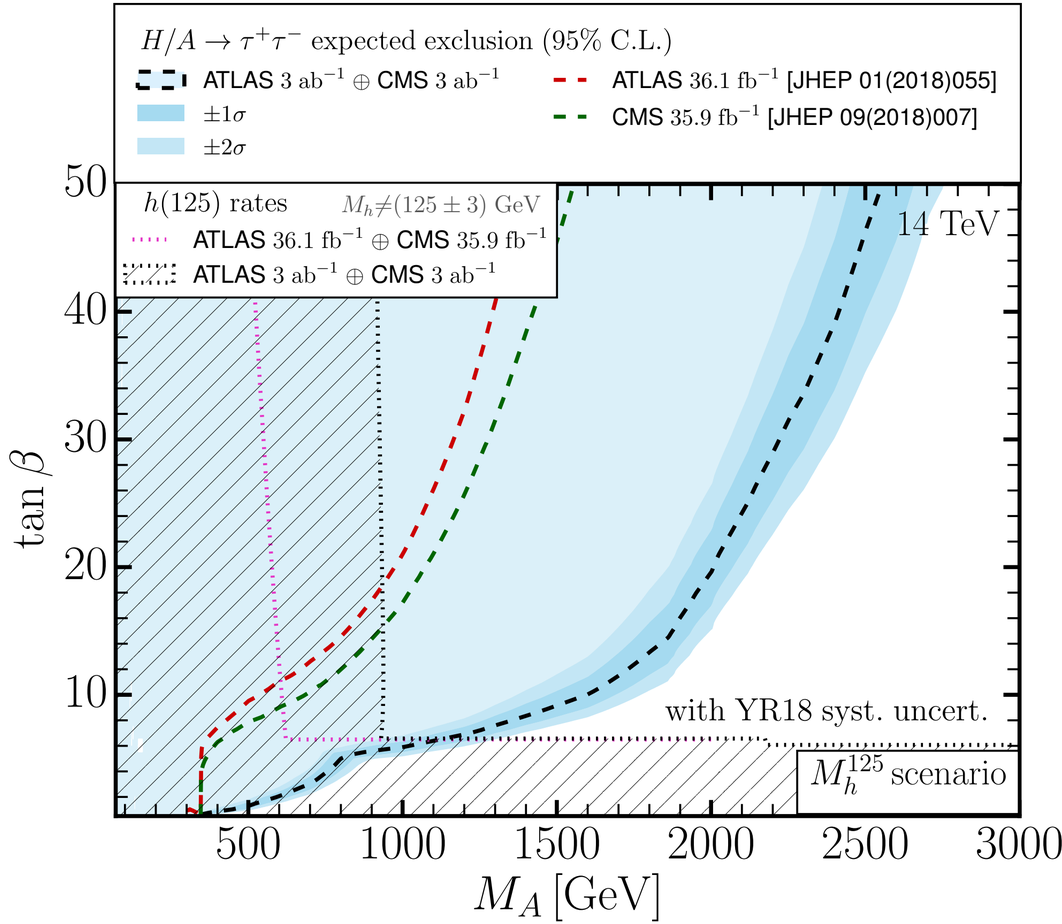

September 2019
tan β
m_A [GeV]
ATLAS
Preliminary
hMSSM, 95% CL limits
Observed
H/A→ττ
√s = 13 TeV, 36.1 fb-1
JHEP 01 (2018) 055
H+→ τν
√s = 13 TeV, 36.1 fb-1
JHEP 09 (2018) 139
H+→ tb
√s = 13 TeV, 36.1 fb-1
JHEP 11 (2018) 085
Hb → bbb
√s = 13 TeV, 27.8 fb-1
arXiv:1907.02749 [hep-ex]
H→ ZZ→ 4l/llνν
√s = 13 TeV, 36.1 fb-1
Eur. Phys. J. C (2018) 78: 293
gg→ A→ Zh
√s = 13 TeV, 36.1 fb-1
JHEP 03 (2018) 174
H→ WW→ lνlν
√s = 13 TeV, 36.1 fb-1
Eur. Phys. J. C 78 (2018) 24
H→ hh→ 4b,
→ bb γγ/ττ,
√s = 13 TeV, 27.5 - 36.1 fb-1
arXiv:1906.02025 [hep-ex]
h couplings [κV, κu, κd]
√s = 13 TeV, 36.1 - 79.8 fb-1
arXiv:1909.02845 [hep-ex]


H/A → τ+τ− expected exclusion (95% C.L.)
ATLAS 3 ab−1 ⊕ CMS 3 ab−1
±1σ
±2σ
ATLAS 36.1 fb−1 [JHEP 01(2018)055]
CMS 35.9 fb−1 [JHEP 09(2018)007]
h(125) rates
Mh≠(125 ± 3) GeV
ATLAS 36.1 fb−1 ⊕ CMS 35.9 fb−1
ATLAS 3 ab−1 ⊕ CMS 3 ab−1
14 TeV
with YR18 syst. uncert.
M_h^125 scenario
tan β
M_A [GeV]