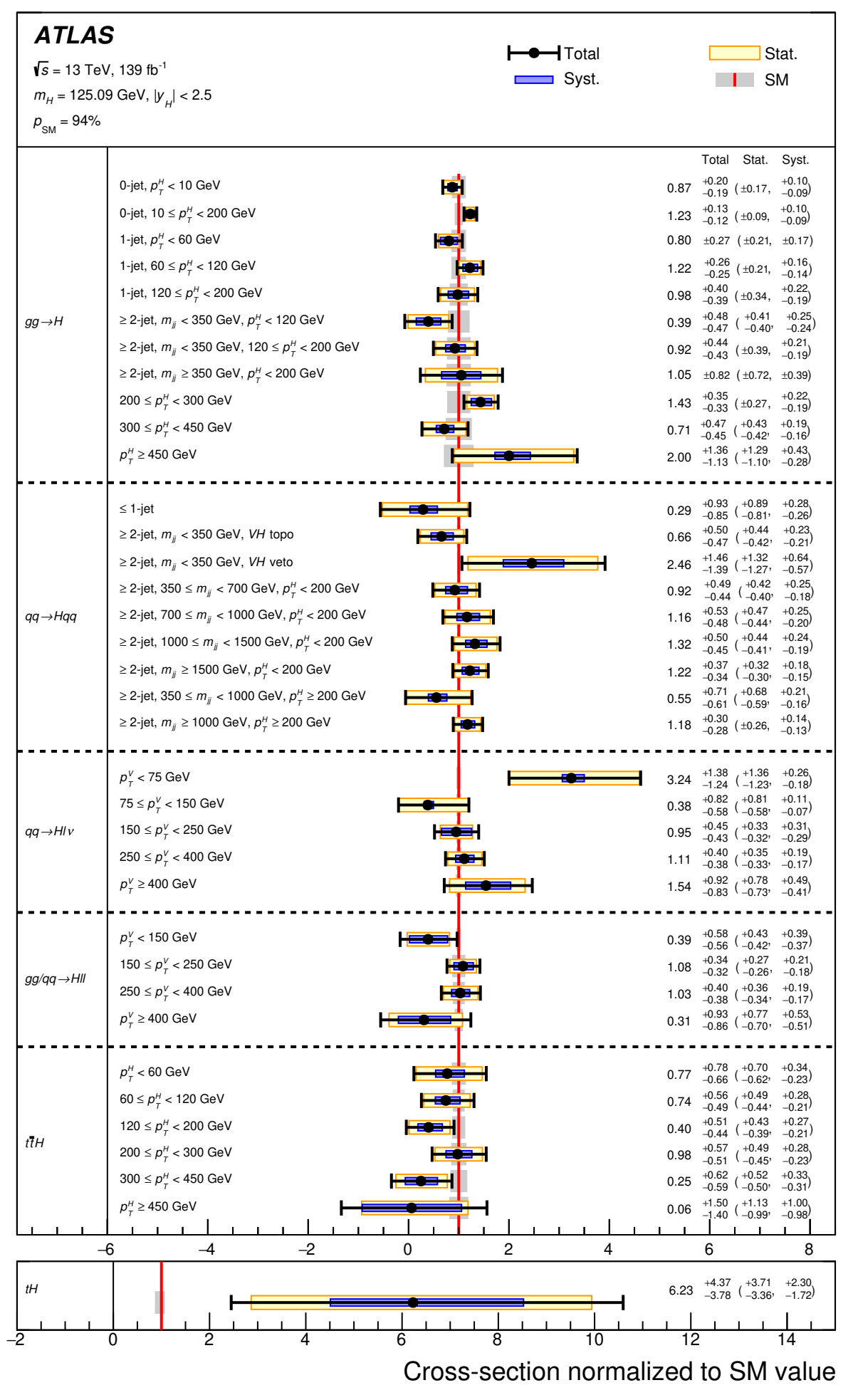
ATLAS
√s = 13 TeV, 139 fb-1
mH = 125.09 GeV, |yH| < 2.5
pSM = 94%
Total
Syst.
Stat.
SM
Total Stat. Syst.
gg→H
0-jet, pTH < 10 GeV 0.87 +0.20 −0.19 (±0.17, +0.10 −0.09)
0-jet, 10 ≤ pTH < 200 GeV 1.23 +0.13 −0.12 (±0.09, +0.10 −0.09)
1-jet, pTH < 60 GeV 0.80 ±0.27 (±0.21, ±0.17)
1-jet, 60 ≤ pTH < 120 GeV 1.22 +0.26 −0.25 (±0.21, +0.16 −0.14)
1-jet, 120 ≤ pTH < 200 GeV 0.98 +0.40 −0.39 (±0.34, +0.22 −0.19)
≥ 2-jet, mjj < 350 GeV, pTH < 120 GeV 0.39 +0.48 −0.47 (+0.41 −0.40, +0.25 −0.24)
≥ 2-jet, mjj < 350 GeV, 120 ≤ pTH < 200 GeV 0.92 +0.44 −0.43 (±0.39, +0.21 −0.19)
≥ 2-jet, mjj ≥ 350 GeV, pTH < 200 GeV 1.05 ±0.82 (±0.72, ±0.39)
200 ≤ pTH < 300 GeV 1.43 +0.35 −0.33 (±0.27, +0.22 −0.19)
300 ≤ pTH < 450 GeV 0.71 +0.47 −0.45 (+0.43 −0.42, +0.19 −0.16)
pTH ≥ 450 GeV 2.00 +1.36 −1.13 (+1.29 −1.10, +0.43 −0.28)
qq→Hqq
≤ 1-jet 0.29 +0.93 −0.85 (+0.89 −0.81, +0.28 −0.26)
≥ 2-jet, mjj < 350 GeV, VH topo 0.66 +0.50 −0.47 (+0.44 −0.42, +0.23 −0.21)
≥ 2-jet, mjj < 350 GeV, VH veto 2.46 +1.46 −1.39 (+1.32 −1.27, +0.64 −0.57)
≥ 2-jet, 350 ≤ mjj < 700 GeV, pTH < 200 GeV 0.92 +0.49 −0.44 (+0.42 −0.40, +0.25 −0.18)
≥ 2-jet, 700 ≤ mjj < 1000 GeV, pTH < 200 GeV 1.16 +0.53 −0.48 (+0.47 −0.44, +0.25 −0.20)
≥ 2-jet, 1000 ≤ mjj < 1500 GeV, pTH < 200 GeV 1.32 +0.50 −0.45 (+0.44 −0.41, +0.24 −0.19)
≥ 2-jet, mjj ≥ 1500 GeV, pTH < 200 GeV 1.22 +0.37 −0.34 (+0.32 −0.30, +0.18 −0.15)
≥ 2-jet, 350 ≤ mjj < 1000 GeV, pTH ≥ 200 GeV 0.55 +0.71 −0.61 (+0.68 −0.59, +0.21 −0.16)
≥ 2-jet, mjj ≥ 1000 GeV, pTH ≥ 200 GeV 1.18 +0.30 −0.28 (±0.26, +0.14 −0.13)
qq→Hlν
pTV < 75 GeV 3.24 +1.38 −1.24 (+1.36 −1.23, +0.26 −0.18)
75 ≤ pTV < 150 GeV 0.38 +0.82 −0.58 (+0.81 −0.58, +0.11 −0.07)
150 ≤ pTV < 250 GeV 0.95 +0.45 −0.43 (+0.33 −0.32, +0.31 −0.29)
250 ≤ pTV < 400 GeV 1.11 +0.40 −0.38 (+0.35 −0.33, +0.19 −0.17)
pTV ≥ 400 GeV 1.54 +0.92 −0.83 (+0.78 −0.73, +0.49 −0.41)
gg/qq→Hll
pTV < 150 GeV 0.39 +0.58 −0.56 (+0.43 −0.42, +0.39 −0.37)
150 ≤ pTV < 250 GeV 1.08 +0.34 −0.32 (+0.27 −0.26, +0.21 −0.18)
250 ≤ pTV < 400 GeV 1.03 +0.40 −0.38 (+0.36 −0.34, +0.19 −0.17)
pTV ≥ 400 GeV 0.31 +0.93 −0.86 (+0.77 −0.70, +0.53 −0.51)
ttH
pTH < 60 GeV 0.77 +0.78 −0.66 (+0.70 −0.62, +0.34 −0.23)
60 ≤ pTH < 120 GeV 0.74 +0.56 −0.49 (+0.49 −0.44, +0.28 −0.21)
120 ≤ pTH < 200 GeV 0.40 +0.51 −0.44 (+0.43 −0.39, +0.27 −0.21)
200 ≤ pTH < 300 GeV 0.98 +0.57 −0.51 (+0.49 −0.45, +0.28 −0.23)
300 ≤ pTH < 450 GeV 0.25 +0.62 −0.59 (+0.52 −0.50, +0.33 −0.31)
pTH ≥ 450 GeV 0.06 +1.50 −1.40 (+1.13 −0.99, +1.00 −0.98)
−6 −4 −2 0 2 4 6 8
tH
6.23 +4.37 −3.78 (+3.71 −3.36, +2.30 −1.72)
−2 0 2 4 6 8 10 12 14
Cross-section normalized to SM value