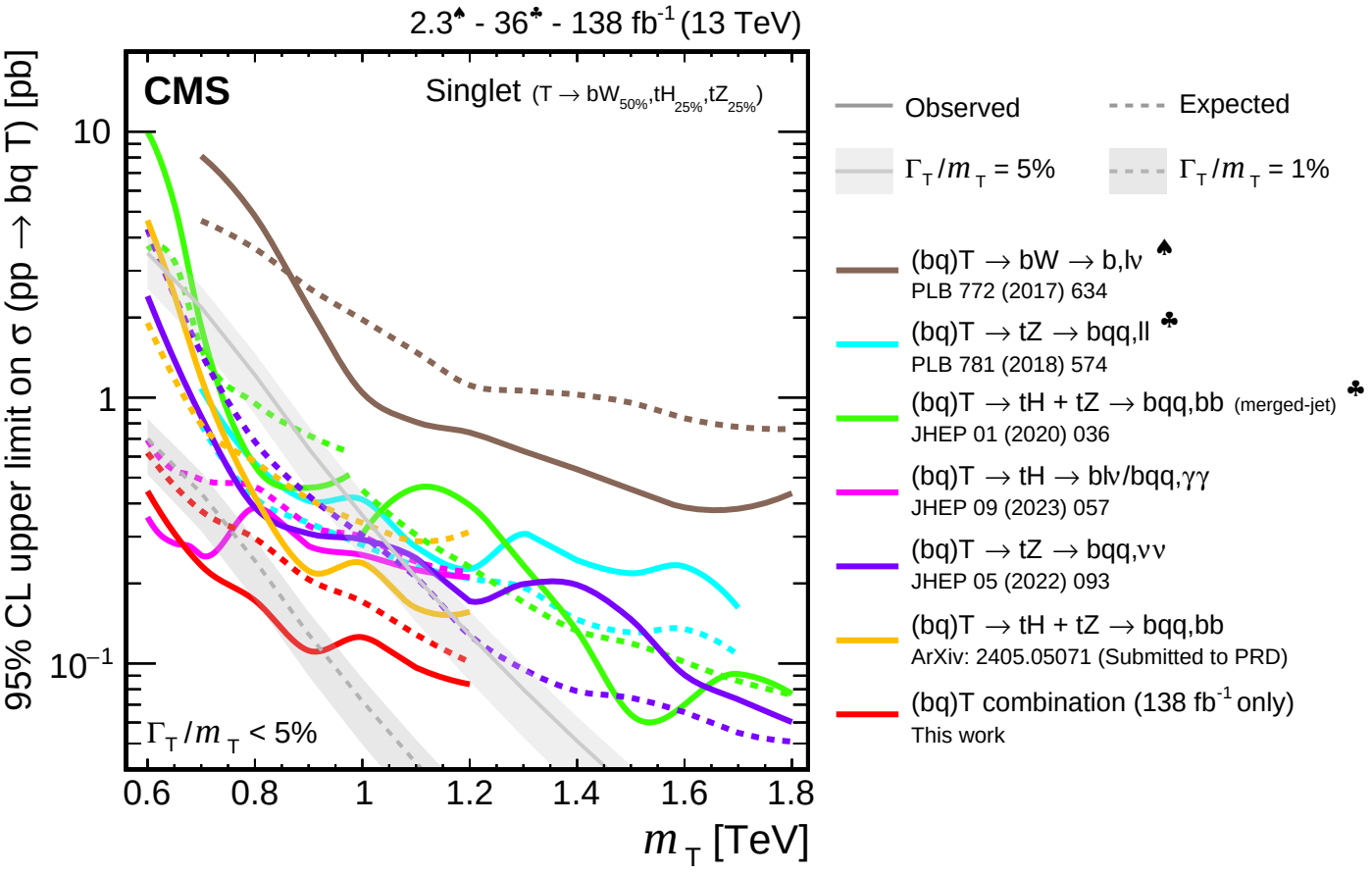
2.3♠ - 36♣ - 138 fb-1 (13 TeV)
CMS
Singlet (T → bW50%,tH25%,tZ25%)
95% CL upper limit on σ (pp → bq T) [pb]
10
1
10−1
Γ_T / m_T < 5%
0.6
0.8
1
1.2
1.4
1.6
1.8
m_T [TeV]
Observed
Expected
Γ_T / m_T = 5%
Γ_T / m_T = 1%
(bq)T → bW → b,lν ♠
PLB 772 (2017) 634
(bq)T → tZ → bqq,ll ♣
PLB 781 (2018) 574
(bq)T → tH + tZ → bqq,bb (merged-jet) ♣
JHEP 01 (2020) 036
(bq)T → tH → blν/bqq,γγ
JHEP 09 (2023) 057
(bq)T → tZ → bqq,νν
JHEP 05 (2022) 093
(bq)T → tH + tZ → bqq,bb
ArXiv: 2405.05071 (Submitted to PRD)
(bq)T combination (138 fb-1 only)
This work