



$\sigma_{\text{meas.}} \pm (\text{stat.}) \pm (\text{syst.})$



$t\bar{t}W$

$0.87 \pm 0.13 \pm 0.14$ pb

$0.77^{+0.12}_{-0.11} \ ^{+0.13}_{-0.12}$ pb

ATLAS, $L_{\text{int}} = 36.1 \text{ fb}^{-1}$

Phys. Rev. D 99 (2019) 072009

CMS, $L_{\text{int}} = 35.9 \text{ fb}^{-1}$

JHEP 08 (2018) 011

$t\bar{t}Z$

$0.99 \pm 0.05 \pm 0.08$ pb

$0.95 \pm 0.05 \pm 0.06$ pb

ATLAS, $L_{\text{int}} = 139 \text{ fb}^{-1}$

Eur. Phys. J. C 81 (2021) 737

CMS, $L_{\text{int}} = 77.5 \text{ fb}^{-1}$

JHEP 03 (2020) 056

$t\bar{t}\gamma+tW\gamma$ dilepton $e\mu$

$0.040 \pm 0.001 \ ^{+0.003}_{-0.002}$ pb $\times 20$

ATLAS, $L_{\text{int}} = 139 \text{ fb}^{-1}$, Vis 1

JHEP 09 (2020) 049

$t\bar{t}\gamma$ dilepton

$0.174 \pm 0.003 \pm 0.006$ pb $\times 5$

CMS, $L_{\text{int}} = 138 \text{ fb}^{-1}$, Vis 2

CMS-PAS-TOP-21-004*

$t\bar{t}\gamma$ l+jets

$0.800 \pm 0.007 \pm 0.046$ pb

CMS, $L_{\text{int}} = 137 \text{ fb}^{-1}$, Vis 3

arXiv:2107.01508

$\sigma_{t\bar{t}V}$ [pb]

