	Electron ID eff.	Electron isol. eff. (syst)	b-tag Eigenvar. 0	c-tag Eigenvar. 0	light-tag Eigenvar. 0	JER DataVsMC MC16	JER EffectiveNP 1	JER EffectiveNP 3	JER EffectiveNP 4	JER EffectiveNP 5	JES flavour composition	JES pileup offset NPV	JES pileup ρ topology	JES effective NP modelling 1	Muon isol. eff. (syst)	Pile-up rew.	Luminosity	Diboson NNPDF30 37	$t\bar{t}$ FSR	$t\bar{t}$ NLO gen.	$t\bar{t}$ PS + had.	$t\bar{t}$ hdamp=3mtop	k(Z+jets)	$k(t\bar{t})$	$\mu(tHq)$
Electron ID eff.	100.0	-0.1	-0.0	0.0	0.0	0.6	-1.1	0.3	-0.4	0.2	-0.6	0.0	0.1	-0.3	-0.1	0.3	-0.1	-0.1	0.6	-0.9	0.8	-0.0	-7.1	-28.1	-1.8
Electron isol. eff. (syst)	-0.1	100.0	-0.0	0.0	0.0	0.2	-0.2	0.0	-0.3	0.3	-0.0	0.1	0.3	-0.1	-0.1	0.1	-0.0	-0.1	0.4	-0.3	0.4	-0.1	-6.8	-24.0	-0.7
b-tag Eigenvar. 0	-0.0	-0.0	100.0	-0.0	-0.0	-0.2	0.2	-0.2	-0.5	0.8	-0.4	-0.1	-0.1	0.0	-0.0	-0.1	-0.0	0.0	0.1	0.2	0.1	0.1	16.8	31.3	0.3
c-tag Eigenvar. 0	0.0	0.0	-0.0	100.0	-0.1	0.2	-1.5	0.7	-0.2	0.5	-0.5	-0.2	-0.5	0.0	0.0	-0.1	-0.1	0.2	0.0	0.1	0.2	0.3	26.2	-0.3	-0.2
light-tag Eigenvar. 0	0.0	0.0	-0.0	-0.1	100.0	0.1	-1.1	0.5	0.3	0.1	-0.5	-0.3	-0.7	0.0	0.0	-0.1	0.0	0.2	-0.3	0.2	-0.1	0.3	29.1	26.7	0.1
JER DataVsMC MC16	0.6	0.2	-0.2	0.2	0.1	100.0	15.3	-6.0	-4.7	6.7	3.1	0.3	2.3	1.7	0.4	-2.2	0.1	-0.3	-1.2	5.6	-2.8	-1.0	-1.6	2.9	-1.9
JER EffectiveNP 1	-1.1	-0.2	0.2	-1.5	-1.1	15.3	100.0	23.3	9.0	-4.2	-9.3	-0.6	-7.8	-2.2	-0.7	2.4	0.2	3.2	5.4	-8.3	0.2	4.3	-12.4	-2.0	-15.8
JER EffectiveNP 3	0.3	0.0	-0.2	0.7	0.5	-6.0	23.3	100.0	-5.3	1.8	-0.7	-1.2	0.7	0.3	0.2	0.3	-0.1	-1.6	-2.3	3.1	-2.1	-2.3	6.4	5.7	-1.4
JER EffectiveNP 4	-0.4	-0.3	-0.5	0.0	0.3	-4.7	9.0	-5.3	100.0	18.1	-5.2	-0.4	1.0	0.6	-0.4	-1.3	-0.3	-0.4	5.0	3.8	-3.0	-1.6	6.4	10.6	-9.4
JER EffectiveNP 5	0.2	0.3	0.8	0.5	0.1	6.7	-4.2	1.8	18.1	100.0	6.2	0.3	-0.7	-2.0	0.2	3.9	0.1	-0.9	-7.1	-7.9	5.1	0.4	6.9	-0.5	2.5
JES flavour composition	-0.6	-0.0	-0.4	-0.5	-0.5	3.1	-9.3	-0.7	-5.2	6.2	100.0	-6.3	-12.4	-2.0	-0.3	2.8	0.2	0.9	-0.4	-1.8	0.8	2.4	-29.0	-1.0	-7.6
JES pileup offset NPV	0.0	0.1	-0.1	-0.2	-0.3	0.3	-0.6	-1.2	-0.4	0.3	-6.3	100.0	-5.3	-0.8	0.1	0.8	0.2	0.4	-2.1	-0.9	4.7	2.1	-16.8	0.9	-3.1
JES pileup ρ topology	0.1	0.3	-0.1	-0.5	-0.7	2.3	-7.8	0.7	1.0	-0.7	-12.4	-5.3	100.0	-1.0	0.2	1.7	0.4	1.2	-2.9	-0.0	-0.7	2.8	-37.8	-22.5	-4.9
JES effective NP modelling 1	-0.3	-0.1	0.0	0.0	0.0	1.7	-2.2	0.3	0.6	-2.0	-2.0	-0.8	-1.0	100.0	-0.2	1.0	-0.1	-0.1	-0.1	-3.1	5.6	0.9	-15.2	0.2	-2.0
Muon isol. eff. (syst)	-0.1	-0.1	-0.0	0.0	0.0	0.4	-0.7	0.2	-0.4	0.2	-0.3	0.1	0.2	-0.2	100.0	0.2	-0.0	-0.1	0.5	-0.6	0.6	-0.1	-10.0	-27.2	-1.4
Pile-up rew.	0.3	0.1	-0.1	-0.1	-0.1	-2.2	2.4	0.3	-1.3	3.9	2.8	0.8	1.7	1.0	0.2	100.0	0.1	0.3	0.1	2.6	-0.7	0.1	-19.1	-31.3	-1.0
Luminosity	-0.1	-0.0	-0.0	0.0	0.0	0.1	0.2	-0.1	-0.3	0.1	0.2	0.2	0.2	-0.1	-0.0	0.1	100.0	-0.1	0.3	-0.3	0.3	-0.2	-8.6	-24.3	-0.5
Diboson NNPDF30 37	-0.1	-0.1	0.0	0.2	0.2	-0.3	3.2	-1.6	-0.4	-0.9	0.9	0.4	1.2	-0.1	-0.1	0.3	-0.1	100.0	0.3	-0.3	-0.3	-0.8	-31.1	0.3	-0.5
$t\bar{t}$ FSR	0.6	0.4	0.1	0.0	-0.3	-1.2	5.4	-2.3	5.0	-7.1	0.4	-2.1	-2.9	-0.1	0.5	0.1	0.3	0.3	100.0	-0.2	6.4	2.2	8.2	2.1	-52.2
$t\bar{t}$ NLO gen.	-0.9	-0.3	0.2	0.1	0.2	5.6	-8.3	3.1	3.8	-7.9	-1.8	-0.9	-0.0	-3.1	-0.6	2.6	-0.3	-0.3	-0.2	100.0	21.0	3.0	0.0	33.0	-47.0
$t\bar{t}$ PS + had.	0.8	0.4	0.1	0.2	-0.1	-2.8	0.2	-2.1	-3.0	5.1	0.8	4.7	-0.7	5.6	0.6	-0.7	0.3	-0.3	6.4	21.0	100.0	-13.2	-9.0	5.4	-3.8
$t\bar{t}$ hdamp=3mtop	-0.0	-0.1	0.1	0.3	0.3	-1.0	4.3	-2.3	-1.6	0.4	2.4	2.1	2.8	0.9	-0.1	0.1	-0.2	-0.8	2.2	3.0	-13.2	100.0	-6.0	3.4	-23.2
k(Z+jets)	-7.1	-6.8	16.8	26.2	29.1	-1.6	-12.4	6.4	6.4	6.9	-29.0	-16.8	-37.8	-15.2	-10.0	-19.1	-8.6	-31.1	8.2	0.0	-9.0	-6.0	100.0	34.8	14.0
$k(t\bar{t})$	-28.1	-24.0	31.3	-0.3	26.7	2.9	-2.0	5.7	10.6	-0.5	-1.0	0.9	-22.5	0.2	-27.2	-31.3	-24.3	0.3	2.1	33.0	5.4	3.4	34.8	100.0	-21.2
$\mu(tHq)$	-1.8	-0.7	0.3	-0.2	0.1	-1.9	-15.8	-1.4	-9.4	2.5	-7.6	-3.1	-4.9	-2.0	-1.4	-1.0	-0.5	-0.5	-52.2	-47.0	-3.8	-23.2	14.0	-21.2	100.0