	Electron ID eff.	b-tag Eigenvar. 0	c-tag Eigenvar. 0	light-tag Eigenvar. 0	JER EffectiveNP 1	JER EffectiveNP 3	JER EffectiveNP 4	JES η intercalibration modelling	JES flavour composition	JES pileup offset NPV	JES pileup ρ topology	JES effective NP modelling 1	Muon isol. eff. (syst)	Pile-up rew.	Tau fake norm.	Z+jets μ_R scale	tW (DR vs. DS)	tW NLO gen.	tW PS + had.	$t\bar{t}Z$ NLO gen. + PS + had.	$t\bar{t}$ FSR	$t\bar{t}$ NLO gen.	$t\bar{t}$ PS + had.	$k(Z+jets)$	$k(t\bar{t})$	$\mu(tHq)$
Electron ID eff.	100.0	0.0	0.0	0.1	-0.2	0.0	-0.2	-0.0	0.1	0.2	0.3	-0.1	-0.1	-0.1	-0.6	0.5	0.1	-0.1	-0.1	-1.0	-0.5	-1.5	1.0	-7.5	-17.0	-1.2
b-tag Eigenvar. 0	0.0	100.0	-0.0	-0.0	0.3	-0.3	-0.3	-0.0	-0.1	-0.1	-0.3	-0.0	0.0	-0.1	0.1	-0.2	0.0	0.1	0.1	0.8	0.3	0.3	0.6	16.0	19.0	0.2
c-tag Eigenvar. 0	0.0	-0.0	100.0	-0.0	-1.0	0.4	0.3	-0.1	-0.1	-0.1	-0.4	-0.0	0.1	-0.1	0.2	-0.3	0.1	0.1	0.1	1.8	-0.1	-0.5	1.3	24.9	-0.3	-0.2
light-tag Eigenvar. 0	0.1	-0.0	-0.0	100.0	-0.6	0.3	0.3	-0.1	-0.1	-0.2	-0.5	0.0	0.0	-0.0	0.5	-0.5	0.1	0.1	0.1	2.1	0.3	0.5	0.6	27.4	15.9	0.4
JER EffectiveNP 1	-0.2	0.3	-1.0	-0.6	100.0	18.8	16.8	-2.8	0.4	1.9	-2.0	-1.4	0.0	0.8	2.4	-1.4	0.7	-2.1	-1.7	17.2	-13.8	-17.6	1.2	-23.1	-6.5	-12.1
JER EffectiveNP 3	0.0	-0.3	0.4	0.3	18.8	100.0	-10.9	0.6	-2.3	-2.0	-0.8	0.6	-0.1	-0.9	-1.4	-0.5	-0.0	1.2	1.0	-5.8	7.3	5.9	4.7	8.1	5.9	4.0
JER EffectiveNP 4	-0.2	-0.3	0.3	0.3	16.8	-10.9	100.0	-0.6	-4.9	-2.3	-2.0	0.1	-0.2	-1.0	-2.1	-1.0	-0.1	0.2	0.2	-5.5	3.6	1.7	2.7	8.6	2.0	1.7
JES η intercalibration modelling	-0.0	-0.0	-0.1	-0.1	-2.8	0.6	-0.6	100.0	-5.2	-1.8	-3.7	-0.3	0.1	0.1	1.0	-3.1	-0.2	-0.8	-0.8	5.6	-3.7	-4.6	-2.0	-17.8	-1.1	-3.6
JES flavour composition	0.1	-0.1	-0.1	-0.1	0.4	-2.3	-4.9	-5.2	100.0	-4.6	-8.4	-0.3	0.2	0.1	1.9	-7.0	-0.3	-1.6	-1.5	9.7	-6.2	-7.5	-5.6	-38.0	-1.0	-6.2
JES pileup offset NPV	0.2	-0.1	-0.1	-0.2	1.9	-2.0	-2.3	-1.8	-4.6	100.0	-4.0	0.2	0.2	-0.1	1.8	-3.8	-0.1	0.1	0.1	7.1	0.4	0.7	-0.3	-19.5	-0.8	-0.3
JES pileup ρ topology	0.3	-0.3	-0.4	-0.5	-2.0	-0.8	-2.0	-3.7	-8.4	-4.0	100.0	0.1	0.3	-0.2	3.4	-7.2	0.1	-0.2	-0.2	16.0	-1.6	-1.9	0.1	-40.9	-18.2	-1.4
JES effective NP modelling 1	-0.1	-0.0	-0.0	0.0	-1.4	0.6	0.1	-0.3	-0.3	0.2	0.1	100.0	-0.1	-0.1	-0.4	0.4	-0.0	-0.4	-0.4	-0.7	-1.6	-2.4	0.2	-16.4	-0.5	-2.1
Muon isol. eff. (syst)	-0.1	0.0	0.1	0.0	0.0	-0.1	-0.2	0.1	0.2	0.2	0.3	-0.1	100.0	-0.1	-0.4	0.1	-0.0	-0.0	-0.0	-0.7	-0.2	-1.0	1.0	-10.0	-16.5	-0.8
Pile-up rew.	-0.1	-0.1	-0.1	-0.0	0.8	-0.9	-1.0	0.1	0.1	-0.1	-0.2	-0.1	-0.1	100.0	-0.4	2.1	0.2	0.2	0.2	0.6	0.7	-0.8	3.4	-14.1	-17.6	0.1
Tau fake norm.	-0.6	0.1	0.2	0.5	2.4	-1.4	-2.1	1.0	1.9	1.8	3.4	-0.6	-0.4	-0.4	100.0	4.2	0.3	-0.5	-0.4	-10.9	-1.7	-6.1	3.5	-16.0	-71.3	-8.1
Z+jets μ_R scale	0.5	-0.2	-0.3	-0.5	-1.4	-0.5	-1.0	-3.1	-7.0	-3.8	-7.2	0.4	0.4	0.1	4.2	100.0	0.0	0.2	0.2	16.4	0.2	1.8	-1.1	6.2	-1.2	1.2
tW (DR vs. DS)	0.1	0.0	0.1	0.1	0.7	-0.0	-0.1	-0.2	-0.5	-0.1	0.1	-0.0	0.1	0.2	0.3	0.0	100.0	-0.7	-0.8	-1.5	-1.3	3.1	-6.8	-1.4	21.5	-2.6
tW NLO gen.	-0.1	0.1	0.1	0.1	-2.1	1.2	0.2	-0.8	-1.6	0.1	-0.2	-0.4	-0.0	0.2	-0.5	0.2	-0.7	100.0	-1.3	-1.8	-4.1	-2.0	-5.9	1.1	18.5	-1.8
tW PS + had.	-0.1	0.1	0.1	0.1	-1.7	1.0	0.2	-0.8	-1.5	0.1	-0.2	-0.4	-0.0	0.2	-0.4	0.2	-0.8	-1.3	100.0	-1.8	-3.8	-1.2	-6.4	0.8	20.0	-2.0
$t\bar{t}Z$ NLO gen. + PS + had.	-1.0	0.8	1.8	2.1	17.2	-5.8	-5.5	5.6	9.7	7.1	16.0	-0.7	-0.7	0.6	-10.9	16.4	-1.5	-1.8	-1.8	100.0	-2.5	-2.0	-12.7	-30.4	13.3	-2.8
$t\bar{t}$ FSR	-0.5	0.3	-0.1	0.3	-13.8	7.3	3.6	-3.7	-6.2	0.4	-1.6	-1.6	-0.2	0.7	-1.7	0.2	-1.3	-4.1	-3.8	-2.5	100.0	-15.6	-14.3	17.0	-3.7	-16.8
$t\bar{t}$ NLO gen.	-1.5	0.3	-0.5	0.5	-17.6	5.9	1.7	-4.6	-7.5	0.7	-1.9	-2.4	-1.0	-0.8	-6.1	1.8	3.1	-2.0	-1.2	-2.0	-15.6	100.0	28.0	10.3	26.5	-28.4
$t\bar{t}$ PS + had.	1.0	0.6	1.3	0.6	1.2	4.7	2.7	-2.0	-5.6	-0.3	0.1	0.2	1.0	3.4	3.5	-1.1	-6.8	-5.9	-6.4	-12.7	-14.3	28.0	100.0	4.6	-8.3	3.0
$k(Z+jets)$	-7.5	16.0	24.9	27.4	-23.1	8.1	8.6	-17.8	-38.0	-19.5	-40.9	-16.4	-10.0	-14.1	-16.0	6.2	-1.4	1.1	0.8	-30.4	17.0	10.3	4.6	100.0	31.4	11.5
$k(t\bar{t})$	-17.0	19.0	-0.3	15.9	-6.5	5.9	2.0	-1.1	-1.0	-0.8	-18.2	-0.5	-16.5	-17.6	-71.3	-1.2	21.5	18.5	20.0	13.3	-3.7	26.5	-8.3	31.4	100.0	-5.1
$\mu(tHq)$	-1.2	0.2	-0.2	0.4	-12.1	4.0	1.7	-3.6	-6.2	-0.3	-1.4	-2.1	-0.8	0.1	-8.1	1.2	-2.6	-1.8	-2.0	-2.8	-16.8	-28.4	3.0	11.5	-5.1	100.0