	EG_SCALE_ALL	JET_Flavor_Composition	JET_Pileup_OffsetNPV	JET_Pileup_RhoTopology	Photon_effIso	efakeSF_	hfakeSF_	lepfakeSF_var1	lepfakeSF_var2	tγ(t channel) Norm	ttbar_pt_hard	tty_dec_Herwig7	tty(dec) Norm	tty_dec_var3c	tty_prod_Herwig7	tty_prod_muF	tty_prod_muR	tty_prod_var3c	highpt_uncalib_ljet	Wtγ Norm	Wγ Norm	Zγ Norm	tty_eta Unfolded Truth Bin 1	tty_eta Unfolded Truth Bin 2	tty_eta Unfolded Truth Bin 3	tty_eta Unfolded Truth Bin 4	tty_eta Unfolded Truth Bin 5	tty_eta Unfolded Truth Bin 6	tty_eta Unfolded Truth Bin 7	tty_eta Unfolded Truth Bin 8
EG_SCALE_ALL	100.0	-0.4	-0.2	-1.4	-1.0	0.1	4.2	1.9	1.6	0.9	0.4	-0.9	11.1	0.4	3.1	0.9	0.6	1.2	-0.2	1.5	-0.3	-1.4	-8.0	-8.5	-8.7	-9.5	-10.8	-13.2	-19.2	-14.9
JET_Flavor_Composition	-0.4	100.0	-1.1	-7.2	-0.2	4.3	-12.3	3.8	-1.2	-1.9	-2.0	-5.0	-3.3	-3.2	0.1	-1.1	2.8	1.7	-3.6	-2.3	-17.1	-12.2	-30.7	-30.7	-30.6	-31.4	-30.7	-29.1	-24.6	-19.9
JET_Pileup_OffsetNPV	-0.2	-1.1	100.0	-1.0	0.1	-2.1	-3.9	-0.2	-0.3	-0.9	-0.4	-1.3	4.9	-0.5	-4.8	0.3	-0.1	-0.1	-0.8	-0.7	-2.7	-0.9	-14.3	-14.0	-14.6	-15.2	-15.8	-15.8	-13.5	-10.7
JET_Pileup_RhoTopology	-1.4	-7.2	-1.0	100.0	-1.4	5.4	-15.3	4.6	0.4	-2.0	-0.5	-3.9	-5.2	-2.4	2.3	-0.3	2.4	2.4	-1.9	-1.3	-12.0	-9.2	-32.6	-33.8	-33.4	-33.7	-32.9	-33.0	-26.8	-20.6
Photon_effIso	-1.0	-0.2	0.1	-1.4	100.0	0.6	-5.8	0.9	-1.9	-0.2	3.9	2.3	-6.7	0.3	0.4	-0.7	3.1	1.9	2.3	2.9	2.7	1.5	-15.1	-15.3	-15.5	-11.4	-11.5	-12.0	-13.6	-10.1
efakeSF_	0.1	4.3	-2.1	5.4	0.6	100.0	-25.3	-4.6	-7.2	-1.1	6.8	26.2	2.7	-3.1	-26.3	1.9	1.9	2.5	-19.3	-4.1	-0.0	-3.6	-13.6	-9.9	-9.7	-12.9	-10.6	-13.3	-7.3	1.4
hfakeSF_	4.2	-12.3	-3.9	-15.3	-5.8	-25.3	100.0	17.9	-4.0	-15.2	17.5	-3.6	-15.4	-5.5	-24.5	2.0	10.6	-2.3	-10.4	1.8	-0.8	-6.0	9.1	12.3	6.9	6.0	4.3	0.8	-25.8	-47.8
lepfakeSF_var1	1.9	3.8	-0.2	4.6	0.9	-4.6	17.9	100.0	1.7	1.2	-1.9	6.2	-6.3	-0.7	-5.9	-0.9	-1.8	-1.3	-1.0	-2.0	2.7	2.5	-6.8	-5.7	-8.6	-9.0	-6.6	-12.9	-22.7	-28.6
lepfakeSF_var2	1.6	-1.2	-0.2	0.4	-1.9	-7.2	-4.0	1.7	100.0	-1.6	2.7	5.9	-16.7	-0.7	-1.3	-1.4	3.1	3.1	-3.1	-1.3	-0.9	-0.8	16.7	18.0	18.1	17.7	17.5	15.2	19.5	17.2
tγ(t channel) Norm	0.9	-1.9	-0.9	-2.0	-0.2	-1.1	-15.2	1.2	-1.6	100.0	-0.4	0.9	-1.6	-1.6	-4.5	0.0	2.9	1.7	-0.6	-1.2	-3.5	-3.8	-2.4	-1.4	-2.4	-1.5	-2.4	-3.3	-0.6	-2.3
ttbar_pt_hard	0.4	-2.0	-0.4	-0.5	3.9	6.8	17.5	-1.9	2.7	-0.4	100.0	-5.0	-19.1	-0.1	9.4	-0.2	-6.6	-1.9	0.1	-6.0	-5.6	-1.4	8.3	7.8	7.1	8.0	8.8	9.1	4.8	3.5
tty_dec_Herwig7	-0.9	-5.0	-1.3	-3.9	2.3	26.2	-3.6	6.2	5.9	0.9	-5.0	100.0	35.9	1.2	8.6	1.3	-6.1	-9.5	5.4	3.5	-5.4	-5.3	-25.8	-23.8	-23.1	-20.6	-17.9	-20.3	-19.5	-14.5
tty(dec) Norm	11.1	-3.3	4.9	-5.2	-6.7	2.7	-15.4	-6.3	-16.7	-1.6	-19.1	35.9	100.0	-16.5	10.3	-17.9	3.6	44.0	38.5	1.9	-0.8	-10.2	-56.8	-57.2	-53.9	-53.3	-53.4	-49.2	-43.9	-29.5
tty_dec_var3c	0.4	-3.2	-0.5	-2.4	0.3	-3.1	-5.5	-0.7	-0.7	-1.6	-0.1	1.2	-16.5	100.0	-1.2	-0.5	0.4	2.6	-4.1	-3.1	-6.7	-4.0	20.1	19.9	20.8	20.5	21.2	20.6	22.0	21.9
tty_prod_Herwig7	3.1	0.1	-4.8	2.3	0.4	-26.3	-24.5	-5.9	-1.3	-4.5	9.4	8.6	10.3	-1.2	100.0	-0.1	1.3	0.2	-5.7	-1.4	-4.2	5.7	9.8	1.4	4.7	10.3	7.9	10.6	16.1	24.1
tty_prod_muF	0.9	-1.1	0.3	-0.3	-0.7	1.9	2.0	-0.9	-1.4	0.0	-0.2	1.3	-17.9	-0.5	-0.1	100.0	1.1	0.7	2.0	0.8	-1.0	-0.2	9.7	10.5	9.0	9.3	9.6	9.1	7.5	5.0
tty_prod_muR	0.6	2.8	-0.1	2.4	3.1	1.9	10.6	-1.8	1.8	2.9	-6.6	-6.1	3.6	0.4	1.3	1.1	100.0	-3.7	-0.9	-2.2	-0.2	1.6	-11.2	-11.7	-10.8	-12.7	-13.3	-13.3	-15.6	-21.2
tty_prod_var3c	1.2	1.7	-0.1	2.4	1.9	2.5	-2.3	-1.3	3.1	1.7	-1.9	-9.5	44.0	2.6	0.2	0.7	-3.7	100.0	0.9	0.8	0.4	-1.4	-28.0	-28.6	-26.5	-27.7	-29.2	-24.3	-23.5	-17.8
highpt_uncalib_ljet	-0.2	-3.6	-0.8	-1.9	2.3	-19.3	-10.4	-1.0	-3.1	-0.6	0.1	5.4	38.5	-4.1	-5.7	2.0	-0.9	0.9	100.0	-7.7	-16.1	-9.1	-22.3	-21.4	-20.8	-20.3	-19.4	-18.5	-14.7	-9.9
Wtγ Norm	1.5	-2.3	-0.7	-1.3	2.9	-4.1	1.8	-2.0	-1.3	-1.2	-6.0	3.5	1.9	-3.1	-1.4	0.8	-2.2	0.8	-7.7	100.0	-13.3	-7.3	-18.1	-17.4	-17.7	-16.6	-15.8	-14.8	-12.9	-6.3
Wγ Norm	-0.3	-17.1	-2.7	-12.0	2.7	-0.0	-0.8	2.5	-0.8	-3.5	-5.6	-5.4	-0.8	-6.7	-4.2	-1.0	0.4	0.4	-16.1	-13.3	100.0	-21.2	17.4	17.8	17.1	18.8	17.9	11.9	12.8	11.0
Zγ Norm	-1.4	-12.2	-0.9	-9.2	1.5	-3.6	-6.0	2.5	-0.8	-3.8	-1.4	-5.3	-10.2	-4.0	5.7	-0.2	1.6	-1.4	-9.1	-7.3	-21.2	100.0	20.9	19.1	19.7	17.7	20.2	24.6	21.0	11.7
tty_eta Unfolded Truth Bin 1	-8.0	-30.7	-14.3	-32.6	-15.1	-13.6	9.1	-6.8	16.7	-2.4	8.3	-25.8	-56.8	20.1	9.8	9.7	-11.2	-28.0	-22.3	-18.1	17.4	20.9	100.0	91.1	91.3	90.9	89.9	88.0	83.4	70.5
tty_eta Unfolded Truth Bin 2	-8.5	-30.7	-14.0	-33.8	-15.3	-9.9	12.3	-5.7	18.0	-1.4	7.8	-23.8	-57.2	19.9	1.4	10.5	-11.7	-28.6	-21.4	-17.4	17.8	19.1	91.1	100.0	90.3	90.5	89.7	87.3	82.0	68.3
tty_eta Unfolded Truth Bin 3	-8.7	-30.6	-14.6	-33.4	-15.5	-9.7	6.9	-8.6	18.1	-2.4	7.1	-23.1	-53.9	20.8	4.7	9.0	-10.8	-26.5	-20.8	-17.8	17.1	19.7	91.3	90.3	100.0	89.4	89.5	87.7	83.9	71.6
tty_eta Unfolded Truth Bin 4	-9.5	-31.4	-15.2	-33.7	-11.4	-12.9	6.0	-9.0	17.7	-1.5	8.0	-20.6	-53.3	20.5	10.3	9.3	-12.7	-27.7	-20.3	-16.6	18.8	17.7	90.9	90.5	89.4	100.0	89.0	87.9	84.3	72.5
tty_eta Unfolded Truth Bin 5	-10.8	-30.7	-15.8	-32.9	-11.5	-10.6	4.3	-6.6	17.5	-2.4	8.8	-17.9	-53.4	21.2	7.9	9.6	-13.3	-29.2	-19.4	-15.8	17.9	20.2	89.9	89.7	89.5	89.0	100.0	86.8	84.4	72.7
tty_eta Unfolded Truth Bin 6	-13.2	-29.1	-15.8	-33.0	-12.0	-13.3	0.8	-12.9	15.2	-3.3	9.1	-20.3	-49.2	20.6	10.6	9.1	-13.3	-24.3	-18.5	-14.8	11.9	24.6	88.0	87.3	87.7	87.9	86.8	100.0	84.8	74.7
tty_eta Unfolded Truth Bin 7	-19.2	-24.6	-13.5	-26.8	-13.6	-7.3	-25.8	-22.7	19.5	-0.6	4.8	-19.5	-43.9	22.0	16.1	7.5	-15.6	-23.5	-14.7	-12.9	12.8	21.0	83.4	82.0	83.9	84.3	84.4	84.8	100.0	87.4
tty_eta Unfolded Truth Bin 8	-14.9	-19.9	-10.7	-20.6	-10.1	1.4	-47.8	-28.6	17.2	-2.3	3.5	-14.5	-29.5	21.9	24.1	5.0	-21.2	-17.8	-9.9	-6.3	11.0	11.7	70.5	68.3	71.6	72.5	72.7	74.7	87.4	100.0