

Table 1: Table: Mean and standard deviation of reconstruted particles for 2016 signal samples

	600	625	650	675	700	800	900	1000	1100	1200
W boson	90.95 \pm 31.48	91.25 \pm 31.78	90.98 \pm 31.58	91.28 \pm 31.72	91.09 \pm 31.67	91.62 \pm 32.00	92.38 \pm 32.76	93.23 \pm 33.78	94.21 \pm 35.17	95.38 \pm 36.46
	80.83 \pm 11.89	80.97 \pm 11.93	80.98 \pm 11.94	81.20 \pm 11.92	81.16 \pm 11.98	81.83 \pm 12.21	82.45 \pm 12.32	83.12 \pm 12.80	83.61 \pm 13.49	83.97 \pm 14.21
top	189.21 \pm 41.78	189.28 \pm 41.65	189.39 \pm 41.58	189.59 \pm 41.51	189.68 \pm 41.62	190.53 \pm 41.29	191.65 \pm 41.14	193.16 \pm 41.32	195.00 \pm 42.07	196.76 \pm 42.53
	168.30 \pm 20.15	168.56 \pm 20.04	168.75 \pm 19.86	169.03 \pm 19.76	169.08 \pm 19.83	170.26 \pm 19.37	171.58 \pm 19.17	172.87 \pm 18.94	173.75 \pm 19.30	174.74 \pm 19.21
tprime	683.50 \pm 229.94	704.80 \pm 232.29	724.36 \pm 234.12	746.76 \pm 235.76	766.38 \pm 238.91	847.73 \pm 244.50	927.48 \pm 252.66	1006.78 \pm 264.80	1085.05 \pm 280.38	1158.46 \pm 294.64
	584.98 \pm 45.60	609.09 \pm 46.84	633.14 \pm 49.22	657.74 \pm 50.34	681.38 \pm 52.66	778.60 \pm 60.15	875.68 \pm 68.80	971.53 \pm 78.78	1064.72 \pm 92.01	1157.42 \pm 105.74

Table 2: Table: Mean and standard deviation of reconstruted particles for 2017 signal samples

	600	625	650	675	700	800	900	1000	1100	1200
W boson	90.35 \pm 31.02	90.17 \pm 30.97	90.39 \pm 31.07	90.34 \pm 31.13	90.57 \pm 31.21	90.84 \pm 31.56	91.56 \pm 32.35	92.47 \pm 33.52	93.54 \pm 34.73	94.19 \pm 35.83
	80.93 \pm 12.32	81.06 \pm 12.31	81.09 \pm 12.39	81.37 \pm 12.35	81.43 \pm 12.42	81.92 \pm 12.58	82.47 \pm 12.89	83.13 \pm 13.15	83.56 \pm 13.82	84.02 \pm 14.82
top	189.37 \pm 41.94	189.26 \pm 41.75	189.34 \pm 41.65	189.62 \pm 41.49	189.53 \pm 41.48	190.63 \pm 41.41	191.38 \pm 41.37	193.02 \pm 41.72	194.84 \pm 42.33	196.30 \pm 42.81
	167.89 \pm 20.73	167.91 \pm 20.65	168.18 \pm 20.76	168.66 \pm 20.50	168.73 \pm 20.39	169.85 \pm 20.02	170.87 \pm 19.93	172.18 \pm 19.67	173.17 \pm 19.61	174.15 \pm 20.02
tprime	682.11 \pm 229.39	703.79 \pm 233.93	722.73 \pm 234.15	743.15 \pm 236.57	762.44 \pm 237.04	842.46 \pm 243.75	920.56 \pm 253.90	998.40 \pm 265.33	1074.82 \pm 280.72	1145.44 \pm 297.45
	583.25 \pm 46.82	607.38 \pm 48.28	631.72 \pm 50.46	656.54 \pm 51.70	680.25 \pm 53.25	776.99 \pm 61.47	872.91 \pm 70.21	968.03 \pm 80.49	1061.88 \pm 92.47	1153.94 \pm 107.07

Table 3: Table: Mean and standard deviation of reconstruted particles for 2018 signal samples

	600	625	650	675	700	800	900	1000	1100	1200
W boson	90.66 \pm 31.09	90.57 \pm 31.13	90.54 \pm 31.18	90.67 \pm 31.34	90.85 \pm 31.36	91.27 \pm 31.79	91.77 \pm 32.48	92.81 \pm 33.62	93.77 \pm 34.74	94.90 \pm 36.21
	80.95 \pm 12.32	81.04 \pm 12.17	81.05 \pm 12.29	81.25 \pm 12.26	81.33 \pm 12.29	81.85 \pm 12.42	82.48 \pm 12.76	83.08 \pm 13.14	83.58 \pm 13.67	84.08 \pm 14.58
top	188.64 \pm 41.39	188.87 \pm 41.66	188.88 \pm 41.64	189.25 \pm 41.59	189.39 \pm 41.51	190.27 \pm 41.37	191.35 \pm 41.43	192.50 \pm 41.46	194.49 \pm 42.15	196.27 \pm 42.71
	167.75 \pm 20.46	167.94 \pm 20.44	168.06 \pm 20.54	168.45 \pm 20.25	168.81 \pm 20.12	169.71 \pm 19.88	170.90 \pm 19.83	172.01 \pm 19.53	173.00 \pm 19.60	174.29 \pm 19.60
tprime	679.70 \pm 230.50	699.19 \pm 230.34	719.33 \pm 232.20	740.59 \pm 233.95	759.52 \pm 234.19	841.96 \pm 243.97	920.99 \pm 251.83	998.54 \pm 264.78	1075.19 \pm 280.97	1146.09 \pm 297.12
	583.46 \pm 46.00	607.79 \pm 47.90	631.38 \pm 50.11	656.32 \pm 51.03	680.57 \pm 52.79	776.52 \pm 61.26	873.58 \pm 69.44	968.42 \pm 80.01	1062.81 \pm 90.87	1154.69 \pm 106.77