

Status

$$e^+e^- \rightarrow HA \rightarrow bbbb$$

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Run over SM backgrounds.

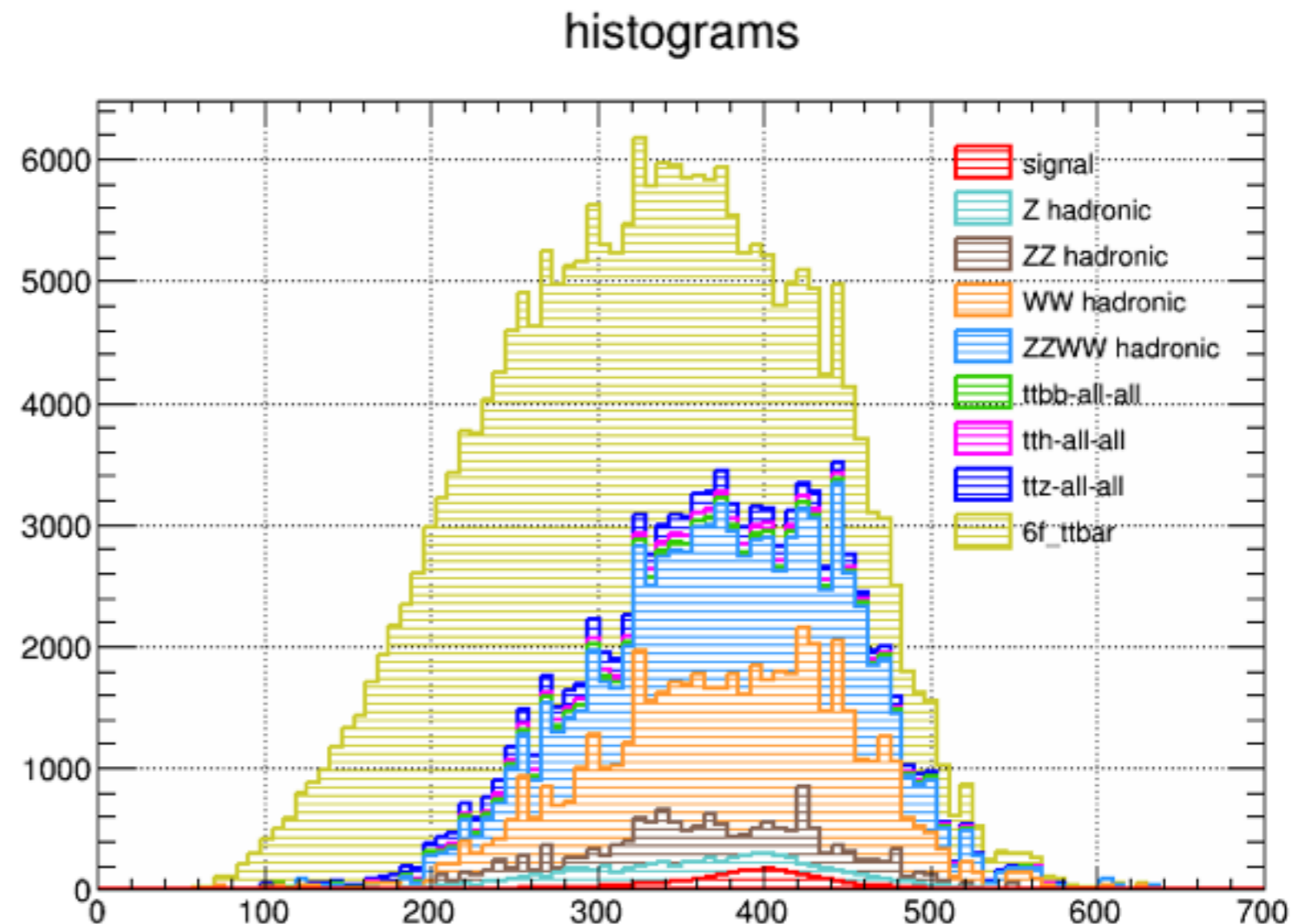
Cuts :

Cut 1 : Principal Thrust < 0.9
 WW_4f, ZZ_4f,
 ZZWWMix_4f, Z_2q

Cut 2 : Major Thrust > 0.3

Cut 3 : DPhi jet pairs > 1.0

Cut 4 : Transverse EVis > 250
 tth-all-all, ttbb-all-all,
 ttz-all-all, ttbar_6f

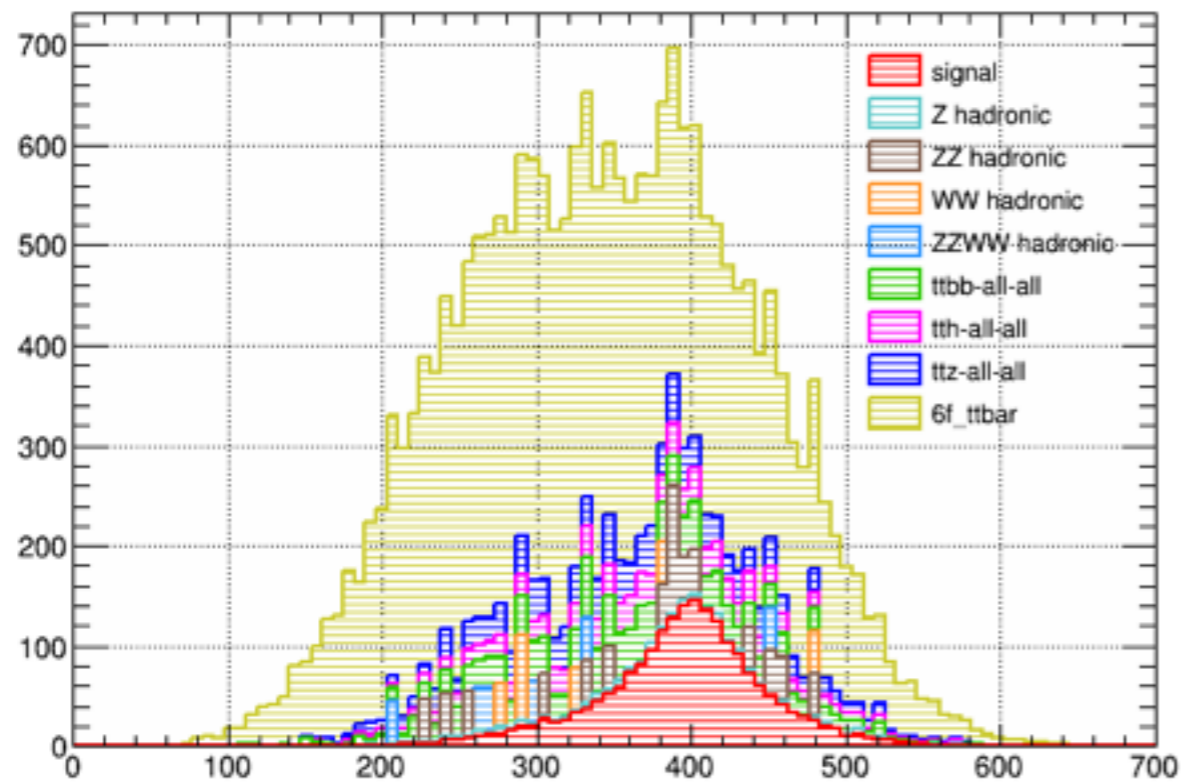


Cuts :

Cut 5 : Sum of 4 jet btags > 3.0

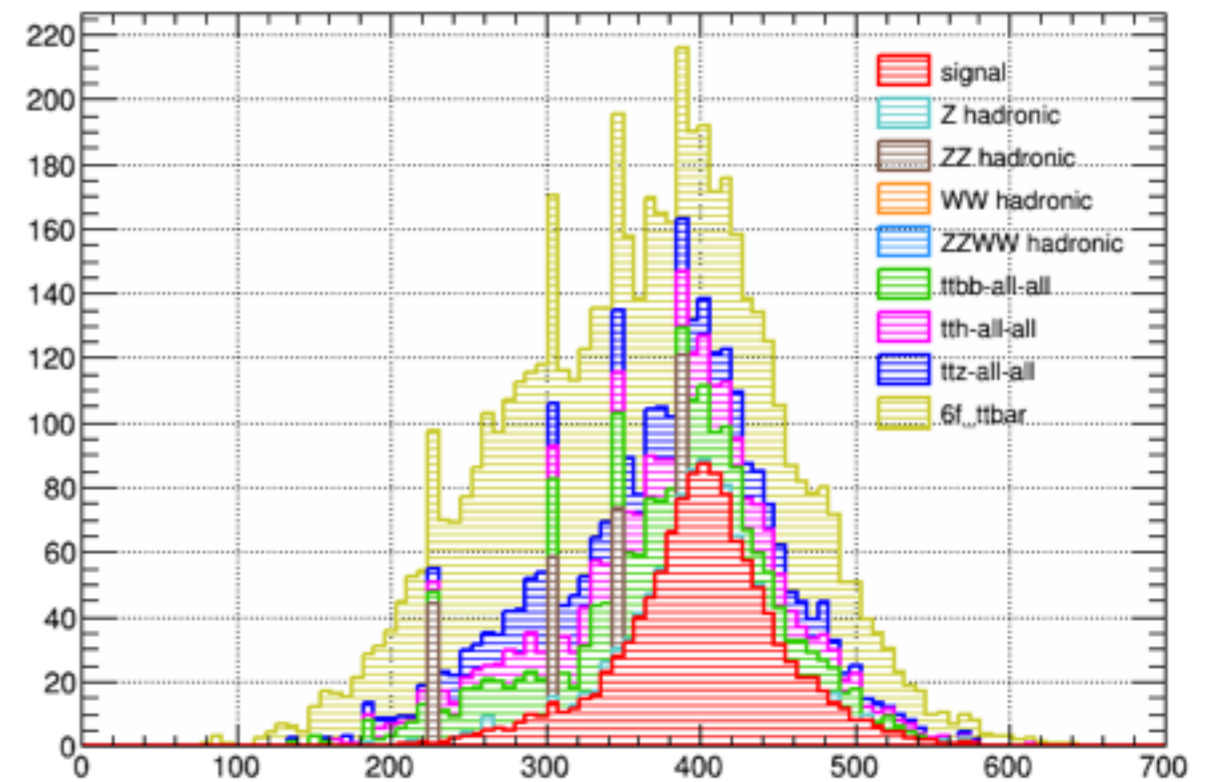
Cut 6 : Sum of 4 jet btags > 3.6

histograms



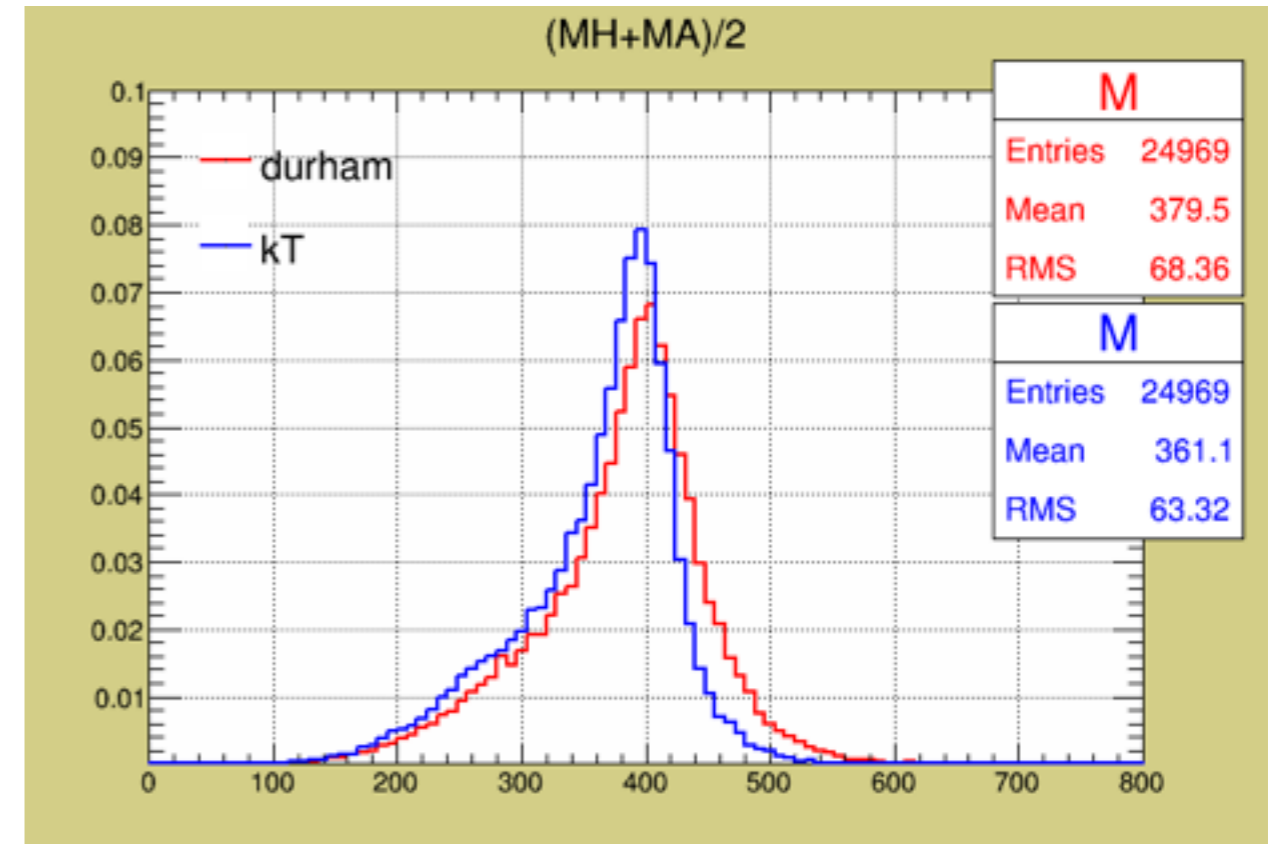
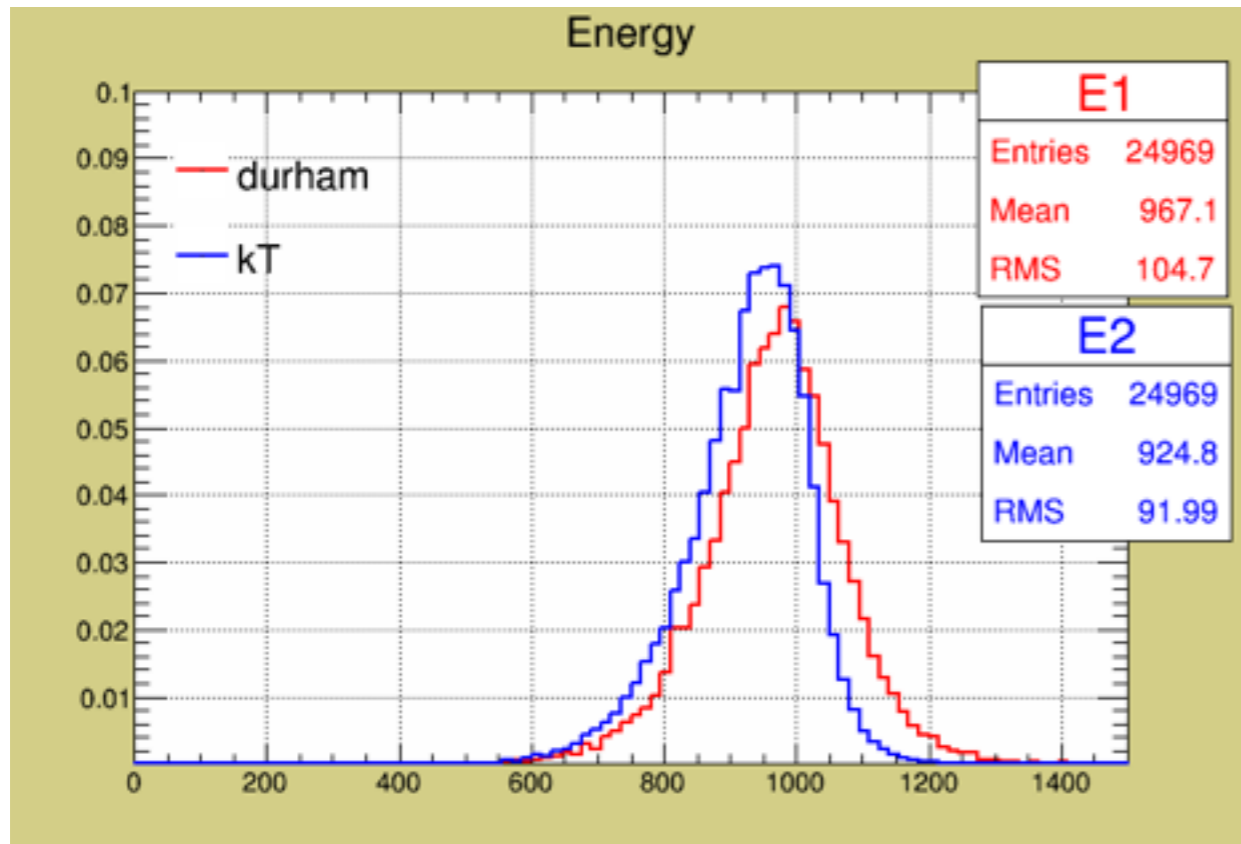
Sum of 4 jets BTag > 3.0

histograms



Sum of 4 jets BTag > 3.0

	Signal	Z 2f	ZZ 4f	WW 4f	ZZWW 4f	ttbb all-all	tth all-all	ttz all-all	ttbar 6f
	24969	217486	6994	77835	64851	3600	21772	13829	4273410
Cut1	24592	31342	1222	7341	6239	3400	21664	13573	2677370
Eff %	98.49	14.41	17.47	9.43	9.62	94.44	99.50	98.15	62.65
Cut 2	24156	23545	897	5293	4524	2851	20334	12297	1982040
Eff %	96.74	10.83	12.82	6.80	6.97	79.19	93.39	88.92	46.38
Cut 3	18061	12570	507	2893	2469	1595	12558	7562	1068040
Eff %	72.33	5.86	7.25	3.71	3.80	44.30	57.67	54.68	24.99
Cut 4	15155	3303	197	867	793	1174	9444	5410	656026
Eff %	60.69	1.52	2.82	1.11	1.22	32.61	43.37	39.12	15.35
Cut 5	12338	113	16	6	6	839	3492	1300	82196
Eff %	49.41	0.05	0.22	- nil -	- nil -	23.30	16.04	9.40	1.92
Cut 6	7175	30	4	0	0	379	1400	451	13505
Eff %	28.76	0.01	0.06	- nil -	- nil -	10.53	6.43	3.26	0.32



- Have run over SM backgrounds.
- Top backgrounds will not go away by cuts, will run TMVA next.
- Will check result with kT algorithm.

Backup

