



Final selection:

Signal	=	2386.33	Post	695.771	Eff	0.291565
Z	=	5.2708e+06	Post	183.188	Eff	3.47552e-05
ZZ	=	167423	Post	48.2805	Eff	0.000288375
WW	=	1.81203e+06	Post	0	Eff	0
ZZWWMix	=	1.51065e+06	Post	23.2762	Eff	1.54081e-05
ttbb	=	3290.41	Post	86.9047	Eff	0.0264115
tth	=	3290.38	Post	87.0463	Eff	0.0264548
ttz	=	7745.81	Post	71.5202	Eff	0.00923341
ttbar	=	437667	Post	529.42	Eff	0.00120964
All bgd	=	9.21289e+06	Post	1029.64	Eff	0.00011176
Significance	=	0.7862	Post	16.7502		

Cut-flow: Z hadronic, ZZ/WW/ZZWWMix hadronic

Sample	Signal	Z hadronic	ZZ hadronic	WW hadronic	ZZWW hadronic
Cuts					
Total	2386.33	5270800	167423	1812030	1510650
Cut1	2350.28	745221	29138.9	171006	145472
Eff %	98.49	14.14	17.40	9.44	9.63
Cut 2	1993.37	283567	10291.5	54032	46166.2
Eff %	83.53	5.38	6.15	2.98	3.06
Cut 3	1528.52	145172	5739.32	29381.9	25159.9
Eff %	78.69	2.75	3.43	1.62	1.66
Cut 4	1308.1	34183.2	2116.57	10692.3	9051.87
Eff %	54.82	0.65	1.26	0.59	0.60
BDT	697.21	183.19	48.28	0	23.28
Eff %	29.16	0.003	0.03	0	0.001

Preliminary Cuts:

Cut 1 : Principal Thrust < 0.9

Cut 2 : Major Thrust > 0.3

Cut 3 : DPhi jet pairs > 1.0

Cut 4 : Transverse EVis > 250

Cut 5 : BDT classifier > 0.3

Cross-sections at 1 TeV

Cross-sections (fb)	eL.pR	eR.pL
Signal	2.27833	0.108
Z had	5062.662	208.134
ZZ had	162.806	4.61696
WW had	1811.6784	0.3517804
ZZWWMix had	1509.4836	1.1612

Scale factor for 1000 fb⁻¹

Scale Factor	eL.pR	eR.pL
Signal	0.0912	0.0044
Z had	29.3002	2.4622
ZZ had	23.2779	1.7247
WW had	23.2759	1.7244
ZZWWMix had	23.2762	1.7254