

Cross section variables	dof	$\chi^2$		
		POW+PYT	POW+HER	FXFX+PYT
$[ y(\mathbf{t}) , p_T(\mathbf{t})]$	15	35	28	61
$[m(\mathbf{t}\bar{\mathbf{t}}), p_T(\mathbf{t})]$	8	86	47	142
$[p_T(\mathbf{t}), p_T(\mathbf{t}\bar{\mathbf{t}})]$	15	35	67	62
$[m(\mathbf{t}\bar{\mathbf{t}}),  y(\mathbf{t}\bar{\mathbf{t}}) ]$	15	77	81	72
$[ y(\mathbf{t}\bar{\mathbf{t}}) , p_T(\mathbf{t}\bar{\mathbf{t}})]$	15	27	67	38
$[m(\mathbf{t}\bar{\mathbf{t}}), p_T(\mathbf{t}\bar{\mathbf{t}})]$	15	61	117	54
$[p_T(\mathbf{t}\bar{\mathbf{t}}), m(\mathbf{t}\bar{\mathbf{t}}), y(\mathbf{t}\bar{\mathbf{t}})]$	47	114	174	119
$[m(\mathbf{t}\bar{\mathbf{t}}),  y(\mathbf{t}) ]$	15	57	38	71
$[m(\mathbf{t}\bar{\mathbf{t}}),  \Delta\eta(\mathbf{t}, \bar{\mathbf{t}}) ]$	11	155	119	209
$[m(\mathbf{t}\bar{\mathbf{t}}),  \Delta\phi(\mathbf{t}, \bar{\mathbf{t}}) ]$	11	71	101	39