

CMS Supplementary

137 fb⁻¹ (13 TeV)

signal regions

H:500	0.2	0.1	3.1	1.3	0.1	5.1	1.8	0.5	6.8	0.9	0.4	0.3	0.1	8.6	2.5	1.5	0.5	0.5	0.1	6.0	1.0	0.2	0.1	0.6	0.1	1.6	0.8	0.2	0.8	0.7	0.2	1.4	1.3	0.0	0.1	0.1	0.1	1.5	1.2	
H:250	0.6	0.3	9.1	3.2	0.3	12.7	4.5	1.3	17.2	3.0	1.2	0.6	0.1	25.2	6.1	2.9	1.4	1.3	0.2	17.5	3.3	0.4	0.2	1.2	0.5	4.3	1.5	0.8	2.4	2.0	0.4	3.7	3.4	0.1	0.2	0.4	0.3	5.7	1.5	
G3:350	0.0	0.0	0.8	0.4	0.1	0.7	0.3	0.1	2.9	0.4	0.1	0.1	0.0	2.6	0.8	0.4	0.1	0.3	0.1	2.6	0.8	0.4	0.1	0.2	0.6	0.1	0.3	0.3	-0.1	0.4	0.3	0.0	0.7	0.5	0.0	0.1	0.2	0.6	0.3	0.1
G3:250	0.1	0.0	1.1	0.3	0.2	0.2	0.1	0.0	4.5	1.2	0.0	0.4	0.0	3.7	1.0	0.4	0.1	0.4	0.1	4.5	0.4	0.2	0.2	0.8	0.1	0.3	0.3	-0.1	0.5	0.3	0.0	1.3	0.8	0.1	0.1	1.7	0.2	0.4	0.1	
G2:350	0.1	0.0	0.7	0.2	0.1	0.7	0.3	0.1	1.7	0.3	0.0	0.1	0.0	2.0	0.5	0.2	0.2	0.1	0.0	1.4	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2	0.2	0.0	0.3	0.2	0.1	0.4	0.1	0.2	0.1	
G2:250	0.1	0.0	0.7	0.1	0.0	0.4	0.2	0.1	2.8	0.6	0.2	0.1	0.0	3.3	0.8	0.0	0.2	0.1	0.0	2.1	0.6	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.0	0.4	0.2	0.5	0.1	0.1	0.0	0.1	0.0
G1:350	0.7	0.3	9.4	3.3	0.6	10.5	3.7	1.1	30.3	5.3	2.2	1.4	0.3	30.2	8.1	2.9	2.0	1.4	0.3	25.2	3.9	0.8	0.6	2.0	0.5	3.7	1.7	0.7	2.1	2.1	0.4	4.8	17.2	0.2	0.2	0.8	0.5	3.4	1.3	
G1:250	1.0	0.4	13.0	3.9	0.9	10.0	3.5	1.0	48.3	8.2	2.4	2.2	0.6	43.9	10.3	3.7	1.9	2.1	0.4	39.3	6.1	1.5	0.9	3.9	0.9	4.5	1.9	0.8	4.0	2.7	0.5	33.0	4.8	0.4	0.3	1.3	0.7	3.7	1.4	
G0:750	0.1	0.1	1.4	0.5	0.1	1.9	0.7	0.2	2.3	0.6	0.2	0.2	0.1	4.4	1.1	0.4	0.3	0.2	0.1	2.3	0.6	0.1	0.0	0.2	0.1	0.6	0.2	0.2	0.3	0.6	0.3	0.5	0.4	0.0	0.0	0.0	0.0	0.4	0.2	
G0:550	0.4	0.2	6.3	2.1	0.4	7.5	2.6	0.8	9.7	2.3	0.8	0.9	0.1	18.1	4.5	1.4	1.2	0.9	0.2	10.4	2.6	0.2	0.1	0.9	0.4	2.2	1.0	0.7	1.5	4.5	0.6	2.7	2.4	0.2	0.2	0.3	0.3	2.0	0.7	
G0:450	0.4	0.2	6.2	2.2	0.4	8.2	2.9	0.9	11.9	2.2	1.0	0.7	0.1	16.3	4.6	1.9	1.1	1.2	0.2	12.2	2.9	0.4	0.5	1.4	0.5	2.8	1.1	0.4	7.3	1.5	0.3	4.0	2.1	0.2	0.2	0.5	0.4	2.4	0.8	
F:450	0.3	0.1	3.5	0.7	0.3	3.9	1.4	0.5	5.1	1.0	0.7	0.3	0.1	10.2	1.8	0.1	0.8	0.1	0.1	5.5	1.6	0.3	-0.0	0.0	0.3	1.1	0.2	1.4	0.4	0.7	0.2	0.8	0.7	0.1	0.1	-0.1	-0.1	0.8	0.2	
F:350	0.3	0.2	4.5	2.0	0.4	7.8	2.7	0.7	8.8	0.9	0.8	0.7	0.1	12.3	3.6	2.3	0.6	0.8	0.2	8.4	1.2	0.4	0.4	0.9	0.1	2.4	2.4	0.2	1.1	1.0	0.2	1.9	1.7	0.1	0.2	0.3	1.5	0.8		
F:250	0.8	0.5	10.9	4.1	0.7	19.3	6.6	2.0	22.6	3.8	2.0	0.8	0.3	33.1	9.0	4.4	2.0	1.8	0.4	20.3	3.8	0.3	0.4	1.3	0.3	14.6	2.4	1.1	2.8	2.2	0.6	4.5	3.7	0.1	0.2	0.3	0.3	4.3	1.6	
E3:350	0.1	0.0	2.0	0.5	0.2	0.9	0.5	0.1	3.1	1.1	0.6	0.1	0.1	4.9	1.1	-0.0	0.3	0.2	0.0	3.7	1.1	0.2	-0.0	0.3	2.3	0.3	0.1	0.3	0.5	0.4	0.1	0.9	0.5	0.1	0.1	0.1	0.1	0.5	0.1	
E3:250	0.3	0.2	3.0	1.3	0.4	2.4	0.9	0.2	15.6	1.9	0.6	0.8	0.2	11.5	3.1	1.3	0.7	1.2	0.3	10.5	1.5	1.0	0.6	8.7	0.3	1.3	0.9	0.0	1.4	0.9	0.2	3.9	2.0	0.3	0.1	0.8	0.6	1.2	0.6	
E2:350	0.1	0.1	0.0	0.3	0.2	0.7	0.2	0.0	6.7	0.4	0.1	0.3	0.1	4.6	0.8	0.7	0.1	0.2	0.1	3.3	0.4	0.3	0.2	0.4	0.6	-0.0	0.4	0.4	-0.0	0.5	0.1	0.0	0.9	0.6	0.1	0.1	0.2	0.2	0.2	0.1
E2:250	0.1	0.2	1.3	0.3	0.3	1.4	0.4	0.2	10.4	0.6	0.5	1.0	0.2	9.5	2.4	0.7	0.5	0.4	0.1	4.5	0.7	8.6	0.3	1.0	0.2	0.3	0.4	0.3	0.4	0.2	0.1	1.5	0.8	0.2	0.1	0.2	0.1	0.4	0.2	
E1:350	0.9	0.3	12.4	3.3	0.8	11.6	4.2	1.3	31.4	6.3	3.2	1.9	0.4	39.0	7.1	2.1	2.3	1.0	0.2	28.5	21.3	0.7	0.4	1.5	1.1	3.8	1.2	1.6	2.9	2.6	0.6	6.1	3.9	0.6	0.3	0.4	0.4	3.3	1.0	
E1:250	5.4	1.8	67.4	18.6	4.8	49.9	18.5	5.1	214.5	36.0	20.4	8.0	2.5	212.9	51.7	15.0	9.7	7.2	1.7	338.0	28.5	4.5	3.3	10.5	3.7	20.3	8.4	5.5	12.2	10.4	2.3	39.3	25.2	2.1	1.4	4.5	2.6	17.5	6.0	
E0:600	0.1	0.0	0.7	0.3	0.1	1.0	0.3	0.1	2.2	0.3	0.1	0.2	0.1	2.3	0.7	0.3	0.2	0.3	0.1	1.7	0.2	0.1	0.1	0.3	0.0	0.4	0.2	0.1	0.2	0.2	0.1	0.4	0.3	0.0	0.0	0.1	0.1	0.2	0.1	
E0:450	0.3	0.2	2.7	1.4	0.2	4.0	1.4	0.4	9.8	1.8	0.3	0.4	0.0	10.7	2.6	1.6	0.6	3.7	0.3	7.2	1.0	0.4	0.2	1.2	0.2	1.8	0.8	0.1	1.2	0.9	0.2	2.1	1.4	0.1	0.1	0.4	0.3	1.3	0.5	
D:600	0.4	0.2	5.5	1.7	0.3	6.2	2.2	0.6	8.5	1.6	1.2	0.6	0.2	15.3	3.4	1.2	6.0	0.6	0.2	9.7	2.3	0.5	0.1	0.7	0.3	2.0	0.6	0.8	1.1	1.2	0.3	1.9	2.0	0.2	0.2	0.1	0.1	1.4	0.5	
D:450	0.5	0.4	6.8	3.2	0.3	13.1	4.3	1.2	18.7	2.3	0.6	1.3	0.2	24.4	7.3	11.2	1.2	1.6	0.3	15.0	2.1	0.7	0.7	1.3	-0.0	4.4	2.3	0.1	1.9	1.4	0.4	3.7	2.9	0.0	0.2	0.4	0.4	2.9	1.5	
D:350	1.7	0.9	20.8	6.3	1.4	25.6	8.5	2.6	59.4	8.4	5.2	3.6	1.0	70.3	63.9	7.3	3.4	2.6	0.7	51.7	7.1	2.4	0.8	0.3	1.1	9.0	3.6	1.8	4.6	4.5	1.1	10.3	8.1	0.8	0.5	1.0	0.8	6.1	2.5	
D:250	6.9	3.3	78.5	25.0	6.9	92.8	31.5	9.2	248.4	40.7	16.6	14.8	3.2	253.4	70.3	24.4	15.3	10.7	2.3	212.9	39.0	9.5	4.6	11.5	4.9	33.1	12.3	10.2	16.3	18.1	4.4	43.9	30.2	3.3	2.0	3.7	2.6	25.2	8.6	
C:800	0.1	0.1	1.0	0.2	0.1	0.8	0.2	0.1	2.9	0.5	0.2	0.8	0.5	3.2	1.0	0.2	0.2	0.0	0.1	2.5	0.4	0.2	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.6	0.3	0.0	0.0	0.0	0.1	0.1	
C:650	0.3	0.2	2.9	0.7	0.4	2.8	0.7	0.3	16.6	2.1	0.3	8.1	0.8	14.8	3.6	1.3	0.6	0.4	0.2	8.0	1.9	1.0	0.3	0.8	0.1	0.8	0.7	0.3	0.7	0.9	0.2	2.2	1.4	0.1	0.1	0.4	0.1	0.6	0.3	
C:550	0.5	0.1	6.7	2.0	0.1	5.2	2.1	0.6	16.1	1.9	17.8	0.3	0.2	16.6	5.2	0.6	1.2	0.3	0.1	20.4	3.2	0.5	0.1	0.6	0.6	2.0	0.8	0.7	1.4	0.8	0.2	2.4	2.2	0.2	0.0	0.0	0.1	1.2	0.4	
C:450	1.1	0.4	12.1	2.6	0.5	6.0	1.9	0.7	45.0	55.6	1.9	2.1	0.5	40.7	8.4	2.3	1.6	1.8	0.3	36.0	6.3	0.6	0.4	1.9	1.1	3.8	0.9	1.0	2.2	2.3	0.6	8.2	5.3	0.6	0.3	1.2	0.4	3.0	0.9	
C:350	6.6	2.2	57.8	16.5	5.6	41.1	13.3	4.1	937.4	45.0	16.1	16.6	2.9	248.4	59.4	18.7	8.5	9.8	2.2	214.5	31.4	10.4	6.7	15.6	3.1	22.6	8.8	5.1	11.9	9.7	2.3	48.3	30.3	2.8	1.7	4.5	2.9	17.2	6.8	
B:700	0.3	0.2	3.9	1.4	0.2	6.7	2.4	0.9	4.1	0.7	0.6	0.3	0.1	9.2	2.6	1.2	0.6	0.4	0.1	5.1	1.3	0.2	0.0	0.2	0.1	2.0	0.7	0.5	0.9	0.8	0.2	1.0	1.1	0.1	0.1	0.0	0.1	1.3	0.5	
B:450	0.9	0.5	13.6	4.8	0.8	22.7	8.8	2.4	13.3	1.9	2.1	0.7	0.2	31.5	8.5	4.3	2.2	1.4	0.3	18.5	4.2	0.4	0.2	0.9	0.5	6.6	2.7	1.5	2.9	2.6	0.7	3.5	3.7	0.2	0.3	0.1	0.3	4.5	1.8	
B:250	2.5	1.6	36.8	13.7	2.1	89.7	22.7	6.7	41.1	6.0	5.2	2.8	0.8	92.8	25.6	13.1	6.2	4.0	1.0	49.9	11.6	1.4	0.7	2.4	0.9	19.3	7.8	3.9	8.2	7.5	1.9	10.0	10.5	0.4	0.7	0.2	0.7	12.7	5.1	
A2:250	0.1	0.1	2.2	0.5	0.2	2.1	0.8	0.2	5.6	0.5	0.1	0.4	0.1	6.9	1.4	0.3	0.3	0.2	0.1	4.8	0.8	0.3	0.2	0.4	0.2	0.7	0.4	0.3	0.4	0.4	0.1	0.9	0.6	0.0	0.1	0.2	0.1	0.3	0.1	
A1:450	0.6	0.3	9.5	7.7	0.5	13.7	4.8	1.4	16.5	2.6	0.1	0.7	0.2	25.0	6.3	3.2	1.7	1.4	0.3	18.6	3.3	0.3	0.3	1.3	0.5	4.1	2.0	0.7	2.2	2.1	0.1	0.5	3.9	3.3	0.1	0.2	0.3	0.4	3.2	1.3
A1:350	2.4	1.0	52.2	9.5	2.2	36.8	13.6	3.9	57.8	12.1	6.7	2.9	1.0	78.5	20.8	6.8	5.5	2.7	0.7	67.4	12.4	1.3	0.0	3.0	2.0	10.9	4.5	3.5	6.2	6.3	1.4	13.0	9							