



Jet Trigger Menu for Run II
Jet Trigger Readiness Review

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Jet trigger menu (I)

Level 1 seed	Rate @ 0.5 & 2x10 ³⁴	HLT chain	Rate @ 0.5 & 2x10 ³⁴	Prescale@2x10 ³⁴	Clients
L1_RD0		j55_a4tcemsubjes	O(Hz)	?	bootstrap
		j60_a4tcemsubjes	O(Hz)	?	bootstrap
J12	0.95 / 3.8 MHz	j55_a4tcemsubjes	150 / 600 kHz	600,000 – 1 Hz	taus
J15	0.53 / 2.1 MHz	j60_a4tcemsubjes	100 / 400 kHz	400,000 – 1 Hz	taus, btag
J20	240 / 970 kHz	j85_a4tcemsubjes	21 / 85 kHz	85,000 – 1 Hz	taus, multi-j
		j85_a4tcemjes			
		j85_a4tclcwsubjes			
		j85_a4tclcwjes			
J25	130 / 510 kHz	j100_a4tcemsubjes	10 / 41 kHz	41,000 – 1 Hz	taus
J30	75 / 300 kHz	j110_a4tcemsubjes	6.5 / 26 kHz	26,000 – 1 Hz	LAr calib
J40	32 / 130 kHz	j150_a4tcemsubjes	1.6 / 6.5 kHz	6500 – 1 Hz	J+MET
J50	15 / 60 kHz	j175_a4tcemsubjes	0.75 / 3 kHz	3000 – 1 Hz	multijet
		j175_a4tcemjes			
		j175_a4tclcwsubjes			
		j175_a4tclcwjes			

Jet trigger menu (II)

Level 1 seed	Rate @ 0.5 & 2x10 ³⁴	HLT chain	Rate @ 0.5 & 2x10 ³⁴	Prescale@2x10 ³⁴	Clients
J60	7.5 / 30 kHz	j200_a4tcmsubjes	0.4 / 1.6 kHz	1600 – 1 Hz	bttag
J75	4 / 17 kHz	j260_a4tcmsubjes	140 / 400 Hz	400 – 1 Hz	bttag, low Lumi
J85	2.5 / 10 kHz	j300_a4tcmsubjes	67 / 270Hz	200 – ≈1 Hz	multijet, medium Lumi
		j320_a4tcmsubjes	43 / 170 Hz	150 – ≈1 Hz	multijet, medium Lumi
J100	1.3 / 5 kHz	j360_a4tcmjes	22 / 90 Hz	100 – ≈1 Hz	unprescaled at 1x10 ³² or lower: aim for 1-2 points during year to change lowest unprescaled chain
		j380_a4tcmsubjes	16 / 65 Hz	50 – ≈1 Hz	
		j380_a4tcmjes			
		j380_a4tclcwsubjes			
		j380_a4tclcwjes	9 / 35 Hz	unprescaled	Also re-think set of cross-check chains with different calibrations if needed
		j400_a4tcmsubjes			
		j400_a4tcmjes			
		j400_a4tclcwsubjes			
j400_a4tclcwjes					
J120	1.3 / 2.7 kHz	j460_a4tcmjes + cross-check chains	<1 / 2.8 Hz	unprescaled	High Lumi
J400	0 / 0 Hz	noAlg	5.5 Hz	unprescaled	Passthrough

Jet trigger menu (III)

Level 1 seed	@ 0.5 & 2x10 ³⁴	HLT chain	@ 0.5 & 2x10 ³⁴	Prescale@2x10 ³⁴	Clients
3J40	0.4 / 1.6 kHz	4j85_a4tcemsubjes	45 / 180 Hz	180	
3J50	0.3 / 1.0 kHz	4j100_a4tcemsubjes	12 / 50 Hz	unprescaled	SUSY, SM, top, jets
4J15	2.4 / 9.5 kHz	5j55_a4tcemsubjes	65 / 260 Hz	260	
4J20	0.5 / 1.9 kHz	5j60_a4tcemsubjes	40 / 170 Hz	170	
4J20	0.5 / 1.9 kHz	5j85_a4tcemsubjes	4 / 15 Hz	unprescaled	SUSY, SM, top, jets
		5j85_a4tcemjes			
		5j85_a4tclcwsubjes			
		5j85_a4tclcwjes			
5J15.0ETA24	0.1 / 0.3 kHz	6j45.0eta24_a4tcemsubjes	25 / 100 Hz	100	SUSY, SM (*)
5J15.0ETA24	0.1 / 0.3 kHz	6j50.0eta24_a4tcemsubjes	10 / 40 Hz	unprescaled	SUSY, SM (*)
5J15.0ETA24	0.1 / 0.3 kHz	6j55.0eta24_a4tcemsubjes	8 / 30 Hz	30	SUSY, SM (*)
HT150	3 / 12 kHz	j360_a10_a4tcemsubjes	14 / 60 Hz	60	exotics, jets
HT190	1.2 / 5 kHz	j460_a10_a4tcemsubjes	2 / 8 Hz	unprescaled	exotics, jets

Jet trigger menu (IV)

Level 1 seed	Rate @ 0.5 & 2x10 ³⁴	HLT chain	Rate @ 0.5 & 2x10 ³⁴	Prescale@2x10 ³⁴	Clients
J15.24ETA49	?	j60.24eta49	?	?	egamma
J15.28ETA32	?	j60.28eta32	?	?	SUSY, SM, top, jets
J20.28ETA32	?	j85.28eta32	?	?	jets
J15.32ETA49	?	j60.32eta49	?	?	jets
J20.32ETA49	?	j85.32eta49	?	?	jets
J30.32ETA49	?	j110.32eta49	?	?	jets
J50.32ETA49	?	j175.32eta49	0	unprescaled	jets
J75.32ETA49	?	j260.32eta49	0	unprescaled	SM
J100.32ETA49	?	j360.32eta49	0	unprescaled	SM
Level 1 seed	Rate @ 0.5 & 2x10 ³⁴	HLT chain	Rate @ 0.5 & 2x10 ³⁴	Prescale@2x10 ³⁴	Clients
HT190	1.2 / 5 kHz	ht1000	3.5/14 Hz (0 unique)	unprescaled	
HT150		Ht500(?)		prescaled	