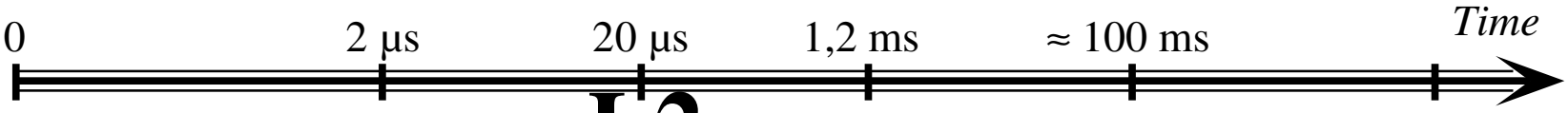
H1

TRIGGERING & FILTERING LEVELS 1995



	L1	L2	L3	L4	L5
NOW					
DEAD TIME	0	20 µs	< 1 ms		
RATE	30 Hz	-	-	5 - 10 Hz	< 5 Hz
DATA RATE	1.2 MBytes/s			≈ 1.8 MBytes/s	.3 MBytes/s
LATER					
MAX. RATE	1 KHz	200 Hz	30 Hz	10 Hz	≈ 3 Hz
	SUBDETECTOR TRIGGERS HARDWARE	FRONT END HARDWARE	FRONT END SOFTWARE	FILTER FARM 30 RISC procs (900 MIPS)	SGI Challenge 18 procs
	STOPS PIPELINE	*STARTS READOUT*	*START EVENT BUILDING*	*DATA LOGGING*	*WRITE DSTs, POT*
Main Functions	TOF.....VETO MWPCs.....Vertex e-tagger.....Ee CALO.....electrons ET, ΔET MUONS.....µ Drift Chamber..... r-ø tracks *46 physics triggers* *70 monitor triggers*	CenTrig MWPCs Drift Chambers rø Digital µ Forward µ LAr Calorimeter SpaCal *Topolog.Trigger* *Neural Network*	*NOT YET*	Fast filter Partial reconstr. - central tracking - calo cluster .... Vertex selection Energy cuts	Online reconstruction Full reconstruction - event classification - data selection