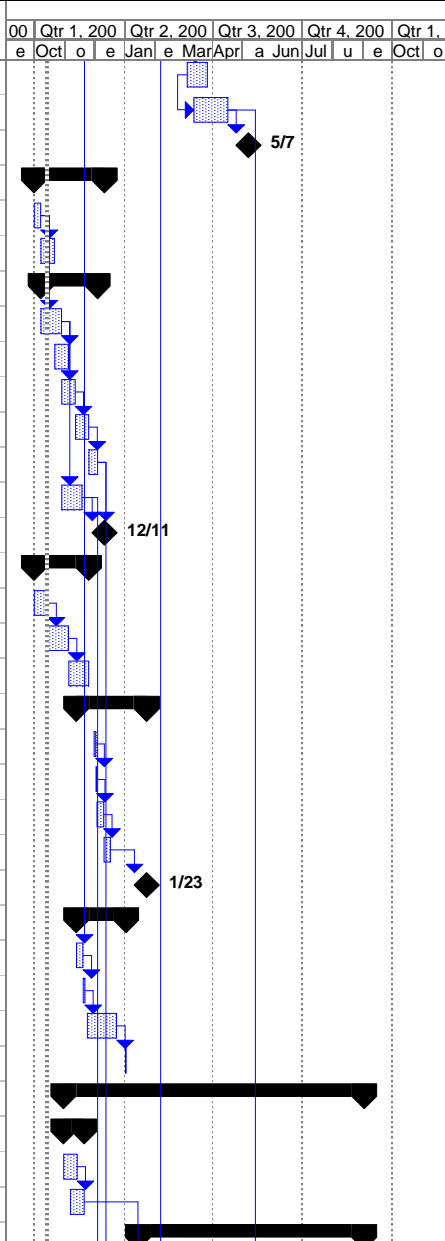


ID	WBS	Task Name	Duration	Start	Finish	Cost	Cont Input (%)	Cont (\$)	Cont (%)	Timeline															
										00	Qtr 1, 200	Qtr 2, 200	Qtr 3, 200	Qtr 4, 200	Qtr 1,										
											e	Oct	o	e	Jan	e	Mar	Apr	a	Jun	Jul	u	e	Oct	o
1	1	Lumi Project	252 days	Wed 10/1/08	Wed 9/30/09	\$705,005.56	0	\$169,734.37	24.08																
2	1.1	Systems Production	232 days	Wed 10/1/08	Wed 9/2/09	\$410,663.20	0	\$105,620.30	25.72																
3	1.1.1	Electronics	148 days	Wed 10/1/08	Thu 5/7/09	\$218,782.00	0	\$57,212.10	26.15																
4	1.1.1.1	Electronics starts	0 days	Wed 10/1/08	Wed 10/1/08	\$0.00	0	\$0.00	0						10/1										
5	1.1.1.2	Pre-Amps	88 days	Wed 10/1/08	Thu 2/12/09	\$99,472.00	0	\$23,649.60	23.78																
6	1.1.1.2.1	Rise time/Impedance/Ringing	31 days	Wed 10/1/08	Wed 11/12/08	\$19,600.00	0	\$5,400.00	27.55																
7	1.1.1.2.1.1	Test detector done	0 wks	Wed 10/1/08	Wed 10/1/08	\$0.00	0	\$0.00	0						10/1										
8	1.1.1.2.1.2	Prepare bench, parts, etc.	1 day	Wed 10/1/08	Wed 10/1/08	\$1,600.00	0	\$0.00	0																
9	1.1.1.2.1.3	Studies	4 wks	Thu 10/2/08	Wed 10/29/08	\$10,800.00	30	\$3,240.00	30																
10	1.1.1.2.1.4	Implement solution	2 wks	Thu 10/30/08	Wed 11/12/08	\$7,200.00	30	\$2,160.00	30																
11	1.1.1.2.2	Shield board	4 days	Thu 11/13/08	Tue 11/18/08	\$4,080.00	0	\$804.00	19.71																
12	1.1.1.2.2.1	Finish layout	2 days	Thu 11/13/08	Fri 11/14/08	\$2,160.00	15	\$324.00	15																
13	1.1.1.2.2.2	Procure parts	1 day	Mon 11/17/08	Mon 11/17/08	\$1,200.00	25	\$300.00	25																
14	1.1.1.2.2.3	Assembly	1 day	Tue 11/18/08	Tue 11/18/08	\$720.00	25	\$180.00	25																
15	1.1.1.2.3	HV board assemble/test	13 days	Wed 11/19/08	Tue 12/9/08	\$30,240.00	0	\$5,112.00	16.9																
16	1.1.1.2.3.1	Check if all parts available	1 day	Wed 11/19/08	Wed 11/19/08	\$720.00	10	\$72.00	10																
17	1.1.1.2.3.2	Assemble and clean	2 wks	Thu 11/20/08	Fri 12/5/08	\$18,000.00	25	\$4,500.00	25																
18	1.1.1.2.3.3	Test	2 days	Mon 12/8/08	Tue 12/9/08	\$2,160.00	25	\$540.00	25																
19	1.1.1.2.4	Integrate Pre-amps	78 days	Wed 10/15/08	Thu 2/12/09	\$45,552.00	0	\$12,333.60	27.08																
20	1.1.1.2.4.1	Add labels to box	2 wks	Wed 10/15/08	Tue 10/28/08	\$1,320.00	20	\$264.00	20																
21	1.1.1.2.4.2	Assemble cables and wires	2 wks	Wed 10/29/08	Tue 11/11/08	\$2,160.00	25	\$540.00	25																
22	1.1.1.2.4.3	Miscellaneous parts	3 days	Wed 11/12/08	Fri 11/14/08	\$2,400.00	25	\$600.00	25																
23	1.1.1.2.4.4	Assemble	4 wks	Wed 12/10/08	Thu 1/15/09	\$19,440.00	25	\$4,860.00	25																
24	1.1.1.2.4.5	Test	4 wks	Fri 1/2/09	Thu 1/29/09	\$20,232.00	30	\$6,069.60	30																
25	1.1.1.2.4.6	Ship PreAmps To CERN	0 days	Thu 2/12/09	Thu 2/12/09	\$0.00	0	\$0.00	0						2/12										
26	1.1.1.3	Shaper	133 days	Wed 10/22/08	Thu 5/7/09	\$43,542.00	0	\$13,457.70	30.91																
27	1.1.1.3.1	Build test stand	2 wks	Wed 10/22/08	Tue 11/4/08	\$3,960.00	25	\$990.00	25																
28	1.1.1.3.2	Box	43 days	Wed 11/5/08	Thu 1/15/09	\$12,150.00	0	\$2,866.50	23.59																
29	1.1.1.3.2.1	Procure parts for box	3 wks	Wed 11/5/08	Tue 11/25/08	\$2,700.00	20	\$540.00	20																
30	1.1.1.3.2.2	Material for the box	3 days	Wed 11/26/08	Tue 12/2/08	\$3,600.00	25	\$900.00	25																
31	1.1.1.3.2.3	Machine boxes	2 wks	Wed 12/3/08	Tue 12/16/08	\$720.00	20	\$144.00	20																
32	1.1.1.3.2.4	Assemble boxes and test	3 wks	Wed 12/17/08	Thu 1/15/09	\$5,130.00	25	\$1,282.50	25																
33	1.1.1.3.3	Integration	70 days	Fri 1/30/09	Thu 5/7/09	\$27,432.00	0	\$9,601.20	35																
34	1.1.1.3.3.1	Performance Optimization	5 wks	Fri 1/30/09	Thu 3/5/09	\$13,500.00	35	\$4,725.00	35																

Project: LHC-LUMI-FY09-BB6
Date: Mon 10/13/08

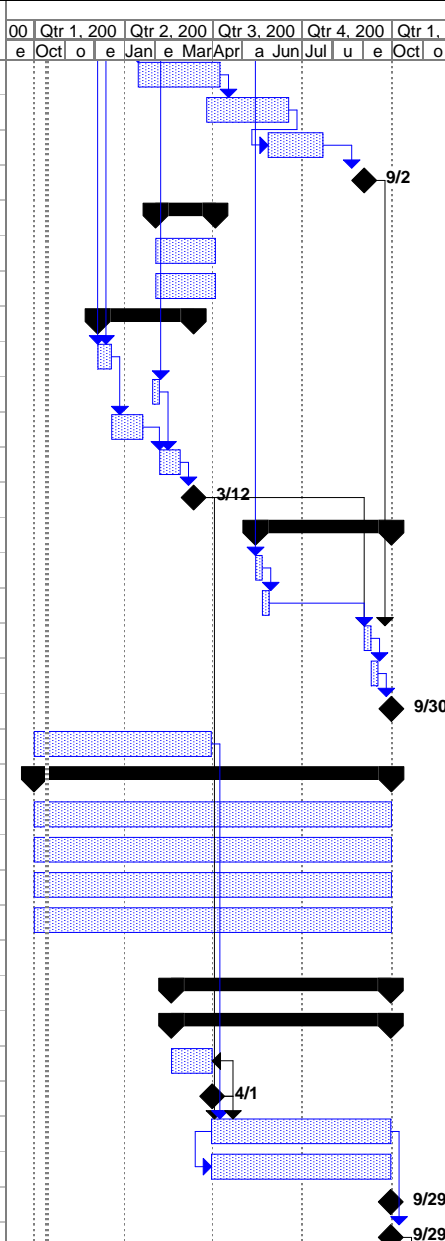
Task Milestone External Tasks
 Split Summary External MileTask
 Progress Project Summary Split

ID	WBS	Task Name	Duration	Start	Finish	Cost	Cont Input (%)	Cont (\$)	Cont (%)	00	Qtr 1. 200	Qtr 2. 200	Qtr 3. 200	Qtr 4. 200	Qtr 1.
										e Oct o	e Jan e	MarApr	a Jun Jul	u e Oct o	
35	1.1.1.3.3.2	Assemble board inside box	3 wks	Fri 3/6/09	Thu 3/26/09	\$2,592.00	35	\$907.20	35						
36	1.1.1.3.3.3	Test	5 wks	Fri 3/13/09	Thu 4/16/09	\$11,340.00	35	\$3,969.00	35						
37	1.1.1.3.3.4	Shapers Complete	0 days	Thu 5/7/09	Thu 5/7/09	\$0.00	0	\$0.00	0						
38	1.1.1.4	Electronics racks	50 days	Wed 10/1/08	Thu 12/11/08	\$75,768.00	0	\$20,104.80	26.53						
39	1.1.1.4.1	Finalize rack layout/drws	1 wk	Wed 10/1/08	Tue 10/7/08	\$4,720.00	20	\$944.00	20						
40	1.1.1.4.2	Document cables for CERN	2 wks	Wed 10/8/08	Tue 10/21/08	\$9,440.00	20	\$1,888.00	20						
41	1.1.1.4.3	Detector Interface Box	40 days	Wed 10/8/08	Thu 12/4/08	\$42,192.00	0	\$11,448.00	27.13						
42	1.1.1.4.3.1	Finalize design	3 wks	Wed 10/8/08	Tue 10/28/08	\$7,080.00	25	\$1,770.00	25						
43	1.1.1.4.3.2	Procure materials	2 wks	Wed 10/22/08	Tue 11/4/08	\$2,360.00	25	\$590.00	25						
44	1.1.1.4.3.3	Materials	2 wks	Wed 10/29/08	Tue 11/11/08	\$18,000.00	30	\$5,400.00	30						
45	1.1.1.4.3.4	Assemble at LBL	2 wks	Wed 11/12/08	Tue 11/25/08	\$10,032.00	25	\$2,508.00	25						
46	1.1.1.4.3.5	Test	1 wk	Wed 11/26/08	Thu 12/4/08	\$4,720.00	25	\$1,180.00	25						
47	1.1.1.4.4	Equipment for the racks	3 wks	Wed 10/29/08	Tue 11/18/08	\$19,416.00	30	\$5,824.80	30						
48	1.1.1.4.5	Ship Electronic Rack components	0 days	Thu 12/11/08	Thu 12/11/08	\$0.00	0	\$0.00	0						
49	1.1.2	Gas Systems Upgrades	40 days	Wed 10/1/08	Tue 11/25/08	\$7,764.00	0	\$2,505.00	32.26						
50	1.1.2.1	Gas Panel Mods	10 days	Wed 10/1/08	Tue 10/14/08	\$0.00	0	\$0.00	0						
51	1.1.2.2	Gas panel programming	3 wks	Wed 10/15/08	Tue 11/4/08	\$4,248.00	30	\$1,274.40	30						
52	1.1.2.3	Testing	3 wks	Wed 11/5/08	Tue 11/25/08	\$3,516.00	35	\$1,230.60	35						
53	1.1.3	Detector Upgrades	43 days	Thu 11/13/08	Fri 1/23/09	\$37,637.20	0	\$11,500.80	30.56						
54	1.1.3.1	Remove from LHC Tunnel	2 days	Mon 12/1/08	Tue 12/2/08	\$2,480.00	35	\$868.00	35						
55	1.1.3.2	Rad hard cabling	1 day	Wed 12/3/08	Wed 12/3/08	\$3,920.00	25	\$980.00	25						
56	1.1.3.3	Mech rework, test	5 days	Thu 12/4/08	Wed 12/10/08	\$10,920.00	35	\$3,822.00	35						
57	1.1.3.4	Install Four Detectors	5 days	Thu 12/11/08	Wed 12/17/08	\$6,200.00	35	\$2,170.00	35						
58	1.1.3.5	Detector Upgrades complete	0 days	Fri 1/23/09	Fri 1/23/09	\$0.00	0	\$0.00	0						
59	1.1.3.6	Test Spare @ ALS BTS beamline	28 days	Thu 11/13/08	Fri 1/2/09	\$14,117.20	0	\$3,660.80	25.93						
60	1.1.3.6.1	Complete Spare	5 days	Thu 11/13/08	Wed 11/19/08	\$5,350.00	30	\$1,605.00	30						
61	1.1.3.6.2	Install spare	2 days	Thu 11/20/08	Fri 11/21/08	\$1,531.20	25	\$382.80	25						
62	1.1.3.6.3	Run Tests	20 days	Mon 11/24/08	Tue 12/23/08	\$5,876.00	25	\$1,469.00	25						
63	1.1.3.6.4	Remove Spare from BTS	1 day	Fri 1/2/09	Fri 1/2/09	\$1,360.00	15	\$204.00	15						
64	1.1.4	DAQ System	210 days	Fri 10/31/08	Wed 9/2/09	\$146,480.00	0	\$34,402.40	23.49						
65	1.1.4.1	DAQ Testing	15 days	Fri 10/31/08	Thu 11/20/08	\$5,680.00	0	\$1,420.00	25						
66	1.1.4.1.1	DAQ Bench testing	2 wks	Fri 10/31/08	Thu 11/13/08	\$2,800.00	25	\$700.00	25						
67	1.1.4.1.2	DAQ Modifications	2 wks	Fri 11/7/08	Thu 11/20/08	\$2,880.00	25	\$720.00	25						
68	1.1.4.2	DAQ Phase II	165 days	Thu 11/15/09	Wed 9/2/09	\$140,800.00	0	\$32,982.40	23.43						



Project: LHC-LUMI-FY09-BB6 Date: Mon 10/13/08	Task		Milestone		External Tasks	
	Split		Summary		External MileTask	
	Progress		Project Summary		Split	

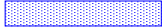

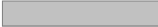





ID	WBS	Task Name	Duration	Start	Finish	Cost	Cont Input (%)	Cont (\$)	Cont (%)	00	Qtr 1. 200	Qtr 2. 200	Qtr 3. 200	Qtr 4. 200	Qtr 1.
										e	Oct o	e	Jan e	MarApr	a
69	1.1.4.2.1	Simulate pulse height	60 days	Thu 1/15/09	Wed 4/8/09	\$44,352.00	20	\$8,870.40	20						
70	1.1.4.2.2	Bench test PH	60 days	Thu 3/26/09	Wed 6/17/09	\$58,560.00	25	\$14,640.00	25						
71	1.1.4.2.3	Hardware Test PH	40 days	Thu 5/28/09	Wed 7/22/09	\$37,888.00	25	\$9,472.00	25						
72	1.1.4.2.4	DAQ Complete	0 days	Wed 9/2/09	Wed 9/2/09	\$0.00	0	\$0.00	0						9/2
73	1.1.5	Documentation	45 days	Mon 2/2/09	Fri 4/3/09	\$0.00	0	\$0.00	0						
74	1.1.5.1	EE Specs & Drawings	45 days	Mon 2/2/09	Fri 4/3/09	\$0.00	0	\$0.00	0						
75	1.1.5.2	ME Specs & Drawings	45 days	Mon 2/2/09	Fri 4/3/09	\$0.00	0	\$0.00	0						
76	1.2	Hardware Commissioning at CERN	63 days	Fri 12/5/08	Thu 3/12/09	\$48,960.00	0	\$12,240.00	25						
77	1.2.1	Ship Rack Equipment	2 wks	Fri 12/5/08	Thu 12/18/08	\$0.00	0	\$0.00	0						
78	1.2.2	Ship Pre-Amps	1 wk	Fri 1/30/09	Thu 2/5/09	\$0.00	0	\$0.00	0						
79	1.2.3	Rack installation by CERN	3 wks	Fri 12/19/08	Mon 1/19/09	\$0.00	0	\$0.00	0						
80	1.2.4	Hardware Systems testing with LabVIEW	15 days	Fri 2/6/09	Thu 2/26/09	\$48,960.00	25	\$12,240.00	25						
81	1.2.5	Hardware Installed and Operational	0 days	Thu 3/12/09	Thu 3/12/09	\$0.00	0	\$0.00	0						3/12
82	1.3	DAQ Integration with CERN Software	99 days	Fri 5/15/09	Wed 9/30/09	\$15,200.00	0	\$0.00	0						
83	1.3.1	Ship Shaper	1 wk	Fri 5/15/09	Thu 5/21/09	\$0.00	0	\$0.00	0						
84	1.3.2	Shaper Installation by CERN	1 wk	Fri 5/22/09	Thu 5/28/09	\$0.00	0	\$0.00	0						
85	1.3.3	Phase II Firmware Installation	5 days	Thu 9/3/09	Wed 9/9/09	\$7,600.00	0	\$0.00	0						
86	1.3.4	Integration	5 days	Thu 9/10/09	Wed 9/16/09	\$7,600.00	0	\$0.00	0						
87	1.3.5	Lumi DAQ ready for phase II mode	0 days	Wed 9/30/09	Wed 9/30/09	\$0.00	0	\$0.00	0						9/30
88	1.4	Physics Studies	6 mons	Wed 10/1/08	Mon 3/30/09	\$16,800.00	25	\$4,200.00	25						
89	1.5	Project Oversight	252 days	Wed 10/1/08	Wed 9/30/09	\$213,382.36	0	\$47,674.07	22.34						
90	1.5.1	Project Management	252 days	Wed 10/1/08	Wed 9/30/09	\$76,134.36	20	\$15,226.87	20						
91	1.5.2	Admin + budget	252 days	Wed 10/1/08	Wed 9/30/09	\$37,296.00	20	\$7,459.20	20						
92	1.4.3	Travel	252 days	Wed 10/1/08	Wed 9/30/09	\$95,152.00	25	\$23,788.00	25						
93	1.5.4	Shipping	252 days	Wed 10/1/08	Wed 9/30/09	\$4,800.00	25	\$1,200.00	25						
94															
95	2	Lumi Beam Commissioning	160 days	Wed 2/18/09	Tue 9/29/09	\$214,060.00	0	\$46,441.00	21.7						
96	2.1	LHC 2009 Run	160 days	Wed 2/18/09	Tue 9/29/09	\$214,060.00	0	\$46,441.00	21.7						
97	2.1.1	Beam commissioning prep at LBL	30 days	Wed 2/18/09	Wed 4/1/09	\$22,500.00	25	\$5,625.00	25						
98	2.1.2	LHC Start-up	0 days	Wed 4/1/09	Wed 4/1/09	\$0.00	0	\$0.00	0						4/1
99	2.1.3	Beam Commissioning Support at CERN	131 days	Tue 3/31/09	Tue 9/29/09	\$141,480.00	20	\$28,296.00	20						
100	2.1.4	Travel	131 days	Tue 3/31/09	Tue 9/29/09	\$50,080.00	25	\$12,520.00	25						
101	2.2	LHC 2010 Run	0 days	Tue 9/29/09	Tue 9/29/09	\$0.00	0	\$0.00	0						9/29
102	2.2.1	LHC Phase II	0 days	Tue 9/29/09	Tue 9/29/09	\$0.00	0	\$0.00	0						9/29



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Task		Milestone		External Tasks	
Split		Summary		External MileTask	
Progress		Project Summary		Split	

ID	WBS	Task Name	Duration	Start	Finish	Cost	Cont Input (%)	Cont (\$)	Cont (%)																	
										00	Qtr 1, 200	Qtr 2, 200	Qtr 3, 200	Qtr 4, 200	Qtr 1,											
											e	Oct	o	e	Jan	e	Mar	Apr	a	Jun	Jul	u	e	Oct	o	
103	2.2.2	Beam Commissioning Support at CERN	0 days	Tue 9/29/09	Tue 9/29/09	\$0.00	0	\$0.00	0																	9/29

Project: LHC-LUMI-FY09-BB6 Date: Mon 10/13/08	Task		Milestone		External Tasks	
	Split		Summary		External MileTask	
	Progress		Project Summary		Split	