

ID	WBS	Task Name	Duration	Start	Finish	Fixed Cost	Cost	Activity	Cost per Unit	Resource Cost																
1		1 ALICE ITS Key Tasks	0 days	Mon 1/2/17	Mon 1/2/17	\$0.00	\$0.00		\$0.00	\$0.00																
2	1.1	ALICE MAPS Production (7/17)	240 days?	Mon 11/28/16	Fri 10/27/17	\$0.00	\$0.00		\$0.00	\$0.00																
3	1.2	ALICE ITS IB FPC Production (9/17)	135 days	Mon 2/27/17	Fri 9/1/17	\$0.00	\$0.00		\$0.00	\$0.00																
4	1.3	ALICE ITS IB Stave Frame Production Ends (1/18)	240 days?	Wed 2/1/17	Tue 1/2/18	\$0.00	\$0.00		\$0.00	\$0.00																
5	1.4	ALICE ITS IB Stave Assembly (3/18)	266 days	Mon 2/27/17	Mon 3/5/18	\$0.00	\$0.00	ITS co	\$0.00	\$0.00																
6	1.5	ALICE ITS Electronics Pre-Production (7/17)	100 days	Mon 3/13/17	Fri 7/28/17	\$0.00	\$0.00	ITS El	\$0.00	\$0.00																
7	1.6	ALICE ITS Electronics Production (6/18)	240 days	Mon 7/31/17	Fri 6/29/18	\$0.00	\$0.00	ITS El	\$0.00	\$0.00																
8		2 LDRD Milestones & Critical Tasks	781 days	Mon 10/3/16	Mon 9/30/19	\$0.00	\$0.00		\$0.00	\$0.00																
9	2.1	LDRD Start and End	781 days	Mon 10/3/16	Mon 9/30/19	\$0.00	\$0.00		\$0.00	\$0.00																
10	2.2	Complete MoU LANL-ALICE	0 days	Fri 12/9/16	Fri 12/9/16	\$0.00	\$0.00		\$0.00	\$0.00																
11	2.3	Setup ALICE Readout Test Stands	0 days	Fri 9/15/17	Fri 9/15/17	\$0.00	\$0.00		\$0.00	\$0.00																
12	2.4	Preliminary readout design to interface sPHENIX DAQ	0 days	Wed 11/1/17	Wed 11/1/17	\$0.00	\$0.00		\$0.00	\$0.00																
13	2.5	Prototype Test during sPHENIX Test Beam Run	21 days	Fri 2/1/19	Fri 3/1/19	\$0.00	\$0.00		\$0.00	\$0.00																
14		3 LANL LDRD	781 days	Mon 10/3/16	Mon 9/30/19	\$0.00	\$2,959,568.00	LANL	\$0.00	\$2,579,068.00																
15	3.1	MOU btw LANL and ALICE for R&D	50 days	Mon 10/3/16	Fri 12/9/16	\$0.00	\$18,400.00		\$0.00	\$18,400.00																
16	3.2	Obtain Designs from ALICE	30 days	Mon 12/12/16	Fri 1/20/17	\$0.00	\$82,800.00		\$0.00	\$82,800.00																
20	3.3	Setup Alice Readout Test Stand	200 days	Mon 12/12/16	Fri 9/15/17	\$0.00	\$135,760.00		\$0.00	\$75,760.00																
23	3.4	Procure R&D ALICE Staves	195 days	Mon 2/27/17	Fri 11/24/17	\$0.00	\$553,720.00		\$0.00	\$466,720.00																
27	3.5	Procure ALICE Electronics & Cables	205 days	Mon 12/12/16	Fri 9/22/17	\$0.00	\$150,020.00		\$0.00	\$71,520.00																
45	3.6	Readout R&D	345 days	Mon 1/23/17	Fri 5/18/18	\$0.00	\$137,840.00		\$0.00	\$137,840.00																
51	3.7	Electronics Final Design Review	12 days	Mon 5/21/18	Tue 6/5/18	\$0.00	\$25,088.00		\$0.00	\$15,088.00																
55	3.8	Prototype readout assembled and tested	90 days	Wed 6/6/18	Tue 10/9/18	\$0.00	\$23,760.00		\$0.00	\$23,760.00																
56	3.9	Mechanical Support and Cooling	200 days	Mon 1/23/17	Fri 10/27/17	\$0.00	\$236,160.00		\$0.00	\$181,160.00																
74	3.10	Prototype Assembly and Test	90 days	Mon 2/26/18	Fri 6/29/18	\$0.00	\$114,240.00		\$0.00	\$114,240.00																
77	3.11	Mechanical Conceptual Design	60 days	Mon 7/2/18	Fri 9/21/18	\$0.00	\$18,240.00		\$0.00	\$18,240.00																
78	3.12	Mechanical Conceptual Design Review	12 days	Mon 9/24/18	Tue 10/9/18	\$0.00	\$33,920.00		\$0.00	\$23,920.00																
82	3.13	Software Tool Development and Analysis	500 days	Mon 1/23/17	Fri 12/21/18	\$0.00	\$351,200.00		\$0.00	\$351,200.00																
85	3.14	Detector Optimizaation and Physics Simulations (MIE)	700 days	Mon 10/3/16	Fri 6/7/19	\$0.00	\$946,000.00		\$0.00	\$896,000.00																
88	3.15	Test Beam Operation	187 days	Fri 1/11/19	Mon 9/30/19	\$0.00	\$132,420.00		\$0.00	\$102,420.00																