



ID	WBS	Task Name	Duration	Start	Finish	Institute	Fixed Cost	calculate fixed cost	Cost	Activity	Number	Resource Cost	cost+contingency
158	2.145.35	Slave Production Full Cost Recovery of CERN Manp	180 days	Mon 11/5/18	Fri 7/12/19		\$500,000.00	\$500,000.00	\$500,000.00		0	\$0.00	\$675,000.00
159	2.145.36	Other ITS/CERN Test Equipment Items	120 days	Mon 11/5/18	Fri 4/19/19		\$30,000.00	\$30,000.00	\$31,862.40		0	\$1,862.40	\$39,828.00
160	2.145.37	Travel and Per Diem at CERN	180 days	Mon 11/5/18	Fri 7/12/19		\$27,000.00	\$27,000.00	\$27,000.00		0	\$0.00	\$29,700.00
161	5.22.146	<b>Non-CERN Procurements</b>	<b>168 days</b>	<b>Wed 8/1/18</b>	<b>Fri 3/22/19</b>		<b>\$0.00</b>	<b>\$1,135,040.00</b>	<b>\$1,167,321.60</b>		<b>0</b>	<b>\$32,281.60</b>	<b>\$1,469,152.00</b>
162	2.146.15	Procure 68 Readout /RDO Units	100 days	Mon 11/5/18	Fri 3/22/19		\$265,740.00	\$265,740.00	\$281,260.00		0	\$15,520.00	\$351,575.00
163	2.146.16	Procure Optical Links 68	60 days	Tue 11/6/18	Mon 1/28/19		\$81,600.00	\$81,600.00	\$82,531.20		0	\$931.20	\$103,164.00
164	2.146.17	Procure 34 Common Readout Units	100 days	Fri 8/3/18	Thu 12/20/18		\$181,700.00	\$181,700.00	\$183,252.00		0	\$1,552.00	\$229,065.00
165	2.146.18	sPHENIX CRU Production Contingency	100 days	Fri 8/3/18	Thu 12/20/18		\$90,000.00	\$90,000.00	\$90,000.00		0	\$0.00	\$112,500.00
166	2.146.19	Procure 100 Sam Tec Cables	60 days	Mon 8/6/18	Fri 10/26/18		\$27,000.00	\$27,000.00	\$27,931.20		0	\$931.20	\$34,914.00
167	2.146.20	Procure Ancillary Materials (LVPS and cables etc)	100 days	Tue 8/7/18	Mon 12/24/18		\$100,000.00	\$100,000.00	\$101,552.00		0	\$1,552.00	\$126,940.00
168	2.146.21	Procure Cooling Plant	100 days	Wed 8/1/18	Tue 12/18/18		\$40,000.00	\$40,000.00	\$41,552.00		0	\$1,552.00	\$51,940.00
169	2.146.22	Procure Assembly Fixtures & Jigs	60 days	Thu 8/2/18	Wed 10/24/18		\$100,000.00	\$100,000.00	\$100,931.20		0	\$931.20	\$126,164.00
170	2.146.23	Procure End Wheels	100 days	Fri 8/3/18	Thu 12/20/18		\$34,000.00	\$34,000.00	\$35,552.00		0	\$1,552.00	\$44,440.00
171	2.146.24	Procure Cylindrical Structural Shells	100 days	Mon 8/6/18	Fri 12/21/18		\$11,000.00	\$11,000.00	\$12,552.00		0	\$1,552.00	\$15,690.00
172	2.146.25	Procure Detector Half Barrels	100 days	Tue 8/7/18	Mon 12/24/18		\$13,000.00	\$13,000.00	\$14,552.00		0	\$1,552.00	\$18,190.00
173	2.146.26	Procure Service Half Barrels	100 days	Wed 8/8/18	Tue 12/25/18		\$120,000.00	\$120,000.00	\$121,552.00		0	\$1,552.00	\$151,940.00
174	2.146.27	Procure Detector and Service Half Barrels	100 days	Thu 8/9/18	Wed 12/26/18		\$21,000.00	\$21,000.00	\$22,552.00		0	\$1,552.00	\$28,190.00
175	2.146.28	Procure Two Half Support Structures	100 days	Fri 8/10/18	Thu 12/27/18		\$50,000.00	\$50,000.00	\$51,552.00		0	\$1,552.00	\$64,440.00
176	1.5.22.3	<b>Assembly and Testing</b>	<b>468 days</b>	<b>Wed 12/19/18</b>	<b>Fri 10/2/20</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>\$206,544.00</b>		<b>0</b>	<b>\$206,544.00</b>	<b>\$234,900.00</b>
177	5.22.3.1	Test Production FEMS, e-Links, CRU, LV, optical link	60 days	Mon 3/25/19	Fri 6/14/19	LBNL	\$0.00	\$0.00	\$13,968.00		0	\$13,968.00	\$17,460.00
178	5.22.3.2	Assemble & Test Cooling System	20 days	Wed 12/19/18	Tue 1/15/19	MIT	\$0.00	\$0.00	\$7,760.00		0	\$7,760.00	\$9,700.00
179	5.22.3.3	Slave Receipt Inspection	10 days	Mon 7/15/19	Fri 7/26/19	LBNL	\$0.00	\$0.00	\$3,880.00		0	\$3,880.00	\$4,850.00
180	5.22.3.4	Individual Slave Readout Test	70 days	Mon 7/29/19	Fri 11/1/19	LBNL	\$0.00	\$0.00	\$10,864.00		0	\$10,864.00	\$13,580.00
181	5.22.3.5	Metrology on Slave Assemblies	70 days	Mon 11/4/19	Fri 2/7/20	LBNL	\$0.00	\$0.00	\$41,720.00		0	\$41,720.00	\$52,150.00
182	5.22.3.6	Assemble full Ladders into Half support	100 days	Mon 2/10/20	Fri 6/26/20	LBNL	\$0.00	\$0.00	\$24,832.00		0	\$24,832.00	\$31,040.00
183	5.22.3.7	Metrology on Final Assembly	10 days	Mon 6/29/20	Fri 7/10/20	LBNL	\$0.00	\$0.00	\$10,400.00		0	\$10,400.00	\$13,000.00
184	5.22.3.8	Half detector Assembly Readout and Cooling Test	60 days	Mon 7/13/20	Fri 10/2/20		\$0.00	\$0.00	\$93,120.00		0	\$93,120.00	\$93,120.00
185	1.5.6	<b>Installation</b>	<b>131 days</b>	<b>Mon 10/5/20</b>	<b>Mon 4/5/21</b>		<b>\$0.00</b>	<b>\$0.00</b>	<b>\$250,400.00</b>		<b>0</b>	<b>\$250,400.00</b>	<b>\$301,048.00</b>
186	1.5.6.1	Installation Prep	10 days	Mon 10/5/20	Fri 10/16/20		\$0.00	\$0.00	\$15,520.00		0	\$15,520.00	\$19,400.00
187	1.5.6.2	Installation Review	1 day	Mon 10/19/20	Mon 10/19/20		\$0.00	\$0.00	\$2,080.00		0	\$2,080.00	\$2,288.00
188	1.5.6.3	Installation	60 days	Tue 10/20/20	Mon 1/11/21		\$0.00	\$0.00	\$186,240.00		0	\$186,240.00	\$232,800.00
189	1.5.6.4	Commissioning	60 days	Tue 1/12/21	Mon 4/5/21		\$0.00	\$0.00	\$46,560.00		0	\$46,560.00	\$46,560.00
190	1.5.7	Ready for beam	0 days	Mon 4/5/21	Mon 4/5/21		\$0.00	\$0.00	\$0.00		0	\$0.00	\$0.00

